



Department of Toxic Substances Control



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Second Response to Comments Dow Chemical Company, Pittsburg Hazardous Waste Facility Boiler and Industrial Furnace Permit and CEQA Negative Declaration

BACKGROUND

Past Public Participation Activities:

The United States Environmental Protection Agency (EPA) public noticed the receipt of the permit application for storage and processing of hazardous waste in two Halogen Acid Furnaces (HAF units) from The Dow Chemical Company in May 1995. A fact sheet was mailed to the facility mailing list.

DTSC public noticed the receipt of the proposed Trial Burn Plan for the HAF units on March 12, 1998. A display advertisement was placed in the Antioch Ledger. A copy of the notice was mailed to the facility mailing list.

DTSC public noticed the draft Boiler and Industrial Furnace (BIF) Permit and draft CEQA Initial Study and Negative Declaration on October 26, 2001. A display advertisement was placed in Contra Costa Times. Copies of the notice and fact sheet were mailed to the facility mailing list (1166 persons).

DTSC held a public workshop and public hearing on the draft BIF Permit and CEQA Initial Study and Negative Declaration on November 28, 2001. A Spanish interpreter provided by DTSC was available during public workshop and public hearing. DTSC received oral and written comments during the public comment period including the public hearing.

In response to public comments, DTSC conducted a community assessment of the City of Pittsburg in May 2002. The community assessment consisted of interviews with public officials and members of community groups. It was found that 29% of the community is Hispanic, 20% is African-American, 3% Asian or other, and 48% is white. Some members of the community requested that Spanish translation should be provided.

To ensure that all members of the community have full opportunity to participate in Dow BIF permit decision, DTSC issued another public notice of the Draft Permit, Draft CEQA Initial Study, and Draft Negative Declaration. The public notice and fact sheet were retranslated and mailed to the site mailing list. A total of 1,166 fact sheets in English and Spanish were mailed to the site mailing list. A public workshop and a public hearing were held on October 24, 2002 and a Spanish interpreter was present at both the public workshop and public hearing. The public notice was published in English in the Contra Costa Times and in Spanish in La Nueva Prensa. Lastly, a paid public notice announcing the Public Hearing aired on KSTN Spanish Radio and an English Language radio station.

DTSC believes that the Draft Permit and the CEQA documents public noticed from September 20, 2002 through November 8, 2002 are appropriate and adequate. Therefore, the Draft Permit and CEQA documents remain unchanged.

A detailed response to all comments received during the public comment period is provided later in this document.

Trial Burn:

To estimate actual emissions of constituents of concern for input into a Health Risk Assessment (HRA) and to establish operating conditions for the HAF units, a Trial Burn Plan was prepared by The Dow Chemical Company and approved by DTSC in March 1999. The Trial Burn Plan was designed to demonstrate that the HAF units meet applicable air emission standards, and to gather actual emission data for various constituents of concern for input into the HRA. Trial burns were conducted between October 1999 and March 2000 under DTSC supervision. The HAF units were operated under three different operating conditions and samples were collected for each condition. The trial burn defined worst-case operating conditions for the HAF units and demonstrated that the units can meet air emission standards for this wide range of operating conditions. These operating conditions have been used to establish permit conditions for the draft BIF permit.

Health Risk Assessment:

The Dow Chemical Company has prepared a Health Risk Assessment (HRA) to support the BIF Permit application and CEQA Initial Study. This HRA was prepared in accordance with procedures approved by DTSC. Emissions from the HAF units were determined by the trial burn program. The emissions calculated from trial burns were entered into a DTSC/EPA approved health risk assessment model with specified exposure assumptions to estimate potential risk to human receptors.

The results of the HRA conclude that the estimated upper limit of additional cancer risk at the nearest residences is approximately one in a million (1.49×10^{-6}). The risk number of 1.49 per million is based on using risk guidance protocols for a Bay Area Air Quality Management District (BAAQMD) permit. The risk number is reduced to 0.83 per million using USEPA/DTSC risk assessment guidance. The excess additional cancer risk using BAAQMD guidance assumes that an individual is continuously exposed (24 hrs/day; 350 days/yr) at the same location for 70 years. The value shown in the comment (1.43×10^{-6}) is the upper bound cancer risk assuming 70 years of continuous exposure at the location of the maximum estimated annual average ground level concentration. To be consistent with USEPA risk assessment guidance, DTSC conservatively assumes that a person lives at the same residence for 30 years (six years as a child + 24 years as an adult) which is reported to as a Reasonable Maximum Exposure (RME) residential exposure scenario. Under these risk assessment assumptions, the upper bound estimated cancer risk at the nearest actual residence is 0.83×10^{-6} which is below the generally accepted *de minimis* risk level of one in a million. The local agency BAAQMD has the authority to require a more conservative estimate of risk as they see fit in enforcing their regulations. As long as the Dow BIF units are in compliance with the BAAQMD air quality regulations, no significant cancer risks from the Dow BIF units are expected to occur.

California Environmental Quality Act (CEQA):

DTSC has prepared an Initial Study in accordance with the provisions of the California Environmental Quality Act. The results of the Initial Study are that there are no significant adverse effects on human health and the environment associated with the operations of these furnaces.

COMMENTS RECEIVED DURING FIRST COMMENT PERIOD **AND RESPONSES TO COMMENTS**

Oral comments were received at the public hearing held on November 28, 2001. A court reporter prepared a transcript of those comments. Written comments were also received during the comment period.

COMMENTS 1 THROUGH 8 WERE RECEIVED FROM MR. JAMES MACDONALD DIRECTOR, CARE (CALIFORNIA FOR RENEWABLE ENERGY) AT THE NOVEMBER 28, 2001 PUBLIC HEARING.

MR. MacDONALD: Thank you. I'll try to keep this short. My name is James MacDonald. I'm a trustee of the Pittsburg Unified School District. I'm also a director of CARE which is Californians for Renewable Energy Incorporated.

I'm here tonight representing myself and CARE, not representing the school district. I do reserve the right and CARE does reserve the right to have any other individuals or group participate on our behalf at any other future litigation or activities that may come about.

Some of what we want to get on the record is --and some of this I'll have to apologize, is a bit outdated. I think I've beat my head against the bricks, another cause comes up.

COMMENT 1:

But nevertheless, this comes from the California American Medical Association, and they're basically talking about nitrous oxide causing asthma in children. Nationally, there has been a 75 percent increase since 1980 in asthma among young children.

This affects their ability to learn in schools, which something I'm definitely interested in. Children miss over ten million school days annually. California is estimated to have one of the -- let's see the State is estimated to be -- the number of people estimated in the State of California is over two million to have asthma, the ninth leading cause of hospitalization nationally.

And one of the reasons, I want to bring this up is one of the byproducts from this plant is nitrogen oxides. And it definitely has been shown to be a health problem in children and deteriorates. Also, the ability of people with respiratory disease -- I'll submit this particular document to you, so you can take a look at it.

RESPONSE TO COMMENT 1:

We agree that common atmospheric pollutants, including nitrogen dioxide, have been associated with increases in a variety of respiratory diseases including asthma. Nitrogen dioxide is regulated as a Priority Pollutant by the federal Clean Air Act. The California Air Resources Board (CARB) and the local Air Quality Management Districts are required by law to enforce the provisions of the federal Clean Air Act. Emissions of nitrogen dioxide from the Dow BIF units are therefore regulated by the CARB and the Bay Area Air Quality Management District (BAAQMD) so as to be protective of human health. A key part of the DTSC permit is compliance with all applicable regulations enforced by the air districts. As long as the Dow BIF units are in compliance with all State and Federal air quality regulations, the emissions of nitrogen dioxide from the BIF units are not expected to produce adverse health effects.

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COMMENT 2:

Also, on this document is a -- refers to a web site, Pittsburg Unified School Districts' complaint. Originally, this document came from complaints against the California Energy Commission. The California Energy Commission also received federal funds, but failed to recognize their responsibility to do environmental justice impact reports on the people of Pittsburg. Pittsburg is over 60 percent minority and low income. The Pittsburg Unified School District also has the same representation, 60 percent minority and low income.

Environmental justice regulations require any agency in the United States receiving federal funds to do an environmental justice analysis. This is part of their permitting process. To date, I don't see any documentation that, in fact, that analysis has been done.

RESPONSE TO COMMENT 2:

For the purpose of defining an environmental justice (EJ) community, there is no official guidance. However, at this time, USEPA is recommending that the community be considered an EJ community. USEPA analyzed demographic data, within three miles of the site, and determined that the community can be considered an EJ Community based on a 58.6 % minority population. DTSC's community assessment process identifies the percentage of non-white residents, languages spoken within a community, and other cultural issues. It also makes recommendations on how DTSC should proceed with its community outreach activities based upon this information in order to ensure information and opportunities for participation in the decision-making process were available.

As noted in the Background section of this document, DTSC conducted this assessment, and took steps to address the needs of the community.

COMMENT 3:

Under environmental justice, 1.49 per million would be a significant finding of health effects to this community. And under the provisions of environmental justice, significant mitigation would need to be implemented before this project can go forward. One of the implementations would require that the best possible technology be incorporated.

And from the workshop we had earlier today, it came out that these furnaces are over 20 years old. And I don't believe that, in fact, that these furnaces are the best possible technology or can achieve LAER, which is the Lowest Achievable Emission Rates. Both of which are required for any processes -- any industries to be located in Pittsburg since we are a minority community and we are in a non-attainment, as far as air pollution, this area does not meet State and federal standards.

CARE has also put in the record for the California Energy Commission and will put in the record for this hearing a document showing that Contra Costa has some of the highest air pollution in the bay area. There already exists a significantly high amount of pollution, and adverse health effects to the population of Pittsburg.

RESPONSE TO COMMENT 3:

The incremental cancer risk number of 1.49 per million is based on using risk guidance protocols for a Bay Area Air Quality Management District (BAAQMD) permit. The incremental cancer risk number is reduced to

0.83 per million using USEPA/DTSC risk assessment guidance. Incremental cancer risk is the risk associated with this project in addition to the other risks from other causes of a person developing cancer over their lifetime. There is no legal requirement that incremental risk to the community must be below one in a million. There are no EJ regulations or guidance that specify a level of significant finding of health effects, nor are there any mitigation measures specified.

The incremental cancer risk numbers were calculated based on the assumptions of a lifetime exposure to emissions from the HAF units (stack and fugitives emissions). The incremental risk of adverse health effects was evaluated under three exposure scenarios. These are:

A maximum exposed individual (MEI) for residential receptors assuming an exposure period of 24 hours per day, 350 days per year, for 70 years and occupational receptors assuming an exposure period of 8 hours per day, 240 days per year for 46 years. The location of the residential cancer MEI occurred about 500 meters to the east of the facility boundary.

A reasonable maximum exposure (RME) for residential receptors assuming an exposure period of 24 hours per day with 24 years of exposure, and occupational receptors using an exposure period of 8 hours per day, 250 days per year for 25 years; and

A 6-year-old child in a residential setting, assuming an exposure period of 24 hours per day, 350 days per year for 6 years.

The requirements of Best Available Control Technology (BACT) and Lowest Achievable Emission Rates apply to new sources under Air District regulations. The BAAQMD has issued its permit and is satisfied with the air pollution devices selected for the halogen acid furnaces.

USEPA guidance recommends treatment of chlorinated waste liquids and gases by incineration. Chlorinated organics are burned in halogen acid furnaces as recommended in federal and State regulations. California Code of Regulations, Title 22 does not specify treatment technologies but rather is performance based. Dow's halogen acid furnaces meet the performance standards.

The BAAQMD reviews permit applications for new and modified equipment to determine if the proposal will comply with regulations. Some of the most important regulations that apply to new and modified sources are our New Source Review rules in Regulation 2, Rule 2. This regulation requires that all new and modified equipment that emit more than a certain trigger level of a pollutant must have the Best Available Control Technology (BACT) for that pollutant. The pollutants subject to BACT are nitrogen oxides (NO_x), carbon monoxide (CO), precursor organic compounds (POC), non-precursor organic compounds (NPOC), fine particulate matter (PM₁₀), and sulfur dioxide (SO₂). The BAAQMD's BACT trigger levels have been modified numerous times since the BAAQMD's permitting requirements began in the 1970s. Under the current requirements, BACT is required for a pollutant (NO_x, CO, POC, NPOC, PM₁₀, or SO₂) if a proposed new/modified source emits 10 pounds per highest day or more of that pollutant.

LAER stands for Lowest Achievable Emission Rate and is essentially the Federal term for BACT, except that the emission rate trigger levels for LAER are higher than our BAAQMD's BACT trigger levels and LAER does not apply to NPOCs.

The two Dow halogen acid furnaces were installed in the late 1970s and early 1980s. At that time, BACT was only required if emissions from a source, group of sources, cumulative emission increases exceeded

150 pounds per day. At that time, Dow's emissions were below the 150 pounds per day trigger level. Therefore, BACT was not required. The operation of each of these incinerators has been modified several times since they were first permitted. However, the emissions and emission increases due to these modifications were all below the BACT trigger levels in effect at the time of the modification. Therefore, these units have never been subject to BACT (or LAER) for any pollutant.

The proposed issuance of the BIF permits does not result in any emission increases and no BAAQMD permits are required. Therefore, this process does not trigger a new review for compliance with BACT. The trial burn data showed that the maximum daily emission rates for CO, POC, NPOC, and PM were all less than 10 pounds per day for each unit. SO₂ and NO_x were not tested for. Based on BAAQMD calculations, SO₂ emissions are also expected to be less than 10 pounds/day. The maximum permitted emission rates for NO_x are 8.6 pounds per day for the MS HAF and 6194 pounds/year (average of 16.97 pounds per day) from the ST HAF. If these units were new sources emitting at the rates determined above, the MS HAF would not trigger BACT for any pollutants and the ST HAF would only trigger BACT for NO_x. To meet BACT for NO_x emissions from a Hazardous Waste Incinerator, the BAAQMD's BACT Handbook requires the use of natural gas only as the supplemental fuel and the use of an approved add-on control technology like selective non-catalytic reduction. The ST HAF uses natural gas as the only supplemental fuel and is equipped with non-selective catalytic reduction as their add-on control technology. This NO_x control scheme would likely be approved as BACT for the ST HAF if this unit was being permitted by the BAAQMD today.

COMMENT 4:

Currently CARE is only asking that these environmental justice concerns be incorporated into the process, that the analysis be done, that you prove us wrong. If you can scientifically show us that we're not suffering from adverse pollution effects that would be great. That would make us be quiet. To date, no one has come forward with that justification for the continuing of putting pollution sources in the city of Pittsburgh, especially when the benefits are basically the people who do not live in Pittsburgh or the corporations and the management people, frankly, many of which don't live in Pittsburgh, a few do.

RESPONSE TO COMMENT 4:

DTSC has determined that the incremental cancer risk associated with the continued operation of the existing halogen acid furnaces is not significant. Please see Response to Comment #3 concerning adverse health effects associated with Dow Chemical Company's two halogen acid furnaces. As stated in Response to Comment #3, there are no environmental justice regulations or guidance that specify a significant level of health effects nor are there any mitigation measures specified.

COMMENT 5:

CARE requests to have the opportunity to inspect the site and to have our own inspectors look at the equipment that is currently located and is of question.

RESPONSE TO COMMENT 5:

DTSC does not have the authority to provide access to non-DTSC personnel. It is up to Dow to grant access authorization. Please contact Mr. Marv Louie of Dow at (925) 432-5525 regarding this matter.

COMMENT 6:

We also request the ability to submit documentation through electronic means to the Internet, if that's possible, and receive the same from you through the Internet. We find that just, you know, trying to get 700 volumes gets expensive.

We do intend to try to get back to you before September 17th with something a little bit more in writing. I'm basically shooting off the hip. I just kind of heard about this in the last few days and wasn't really prepared.

I hope you don't judge CARE by my attitude. We do have some very scholarly people working for CARE.

RESPONSE TO COMMENT 6:

DTSC has the capability of accepting comments through e-mail, regular mail, and voice mail. However, these comments must be submitted during the public comment period. DTSC has posted the Fact Sheet, CEQA initial study, negative declaration, and draft BIF permit on DTSC's internet web page. DTSC is planning to have the complete BIF permit application posted on its web page. It is not available at this time. Please note that the commentor provided his comments via e-mail.

COMMENT 7:

I'm just trying to go over my notes here quickly. We also notice that there wasn't any water impact analysis. Again, under environmental justice, there should be an analysis of the impact on the water and minority groups who may use water resources to supplement food, such as fishing. It's pretty much accepted that 20 percent of air pollution ends up in the water supply, so that analysis needs to be made.

RESPONSE TO COMMENT 7:

The statement that "20% of air pollution ends up in the water supply" is unclear. We are not aware of any scientific studies that conclusively demonstrate that 20% of the measured concentrations of chemicals in the atmosphere over the Sacramento - San Joaquin Delta will be transferred to and measured in adjoining subsurface waters. We agree that chemicals such as dioxins, PCBs and mercury can accumulate in aquatic organisms at concentrations greater than the water concentrations. However, the water concentrations of these types of persistent chemicals will also include the contributions from a wide variety of point and non-point sources, including storm water runoff, in addition to any potential releases from the Dow BIF units. Based on the trial burn emissions estimates and the off-site air dispersion modeling results, the maximum predicted ground level concentrations (GLCs) over the near shore water body just to the northeast of the facility of dioxins are predicted to be less than $4 \times 10^{-12} \mu\text{g}/\text{m}^3$. At the same location, the maximum annual GLC of PCBs is estimated to be $3 \times 10^{-9} \mu\text{g}/\text{m}^3$ and $1 \times 10^{-3} \mu\text{g}/\text{m}^3$ for mercury. These concentrations are orders of magnitudes below typical ambient air levels of dioxins, PCBs and mercury in rural / suburban air. As such DTSC does not believe that a water quality impact, as potentially measured in water or biota, from air emissions from the Dow BIF units can be quantified or differentiated from other point or non-point sources including Central Valley regional storm water runoff into the Delta.

COMMENT 8:

Also, under environmental justice a worst case scenario needs to be done. And that would, in our estimation, include all the on-site materials being dumped into the waterways, either by accident or

sabotage. Also, that all the on-site materials involved in this process being exploded, vaporized and released into the atmosphere, we would consider that to be an acceptable worst case scenario.

We don't believe that simply running the operation at what is assumed to be the highest possible load is a significant worst case scenario. There is real threat of terrorism as we all know. And these types of facilities would be an idea source of -- is a source of great concern for many people as being targets of terrorists.

RESPONSE TO COMMENT 8:

As stated in the Background section of this Response to Comments document, a Health Risk Assessment was prepared to evaluate short and long term impacts of the BIF Permit project on human health and environment. The HRA considered all on-site materials and activities that are involved in the BIF Permit project. In addition to estimating the potential risk to human receptors from continuous emissions over a long time period, e.g., 30 years, the potential risk from a short term exposure resulting from an accidental release was also estimated. The Health Risk Assessment considered plausible scenarios that could result in accidental releases of hazardous constituents. Dow selected the scenarios that would result in maximum off-site consequence. The plausible scenarios considered were:

1. A rupture of the incoming gaseous feed pipeline to the HAF units
2. A rupture of the incoming liquid feed pipeline to the HAF units
3. A rupture of the pyridine storage tank
4. A rupture of the tank T-12
5. External fire with associated release of tank contents

Under normal conditions, these storage tank contents are not ignitable. However, there may be a situation where T-12 could have a higher percentage of one of waste stream (dichloropropene) which if exposed to enough external heat could be ignitable. These tanks do not have any heat or ignition sources in their vicinity. If there is an external fire, the fire would heat the external surface of the tank, thus raising the temperature of the tank contents which would vaporize. These vapors would increase the pressure inside the tanks. These tanks are equipped with pressure safety valves. These safety valves would release tank contents into the vent lines that are piped to HAF units in such an event.

If a tank ruptures, then its contents will be spilled into the secondary containment area. These tanks are placed in tank farms that are equipped with the secondary containment (berm). There will be some volatilization of these contents. Pyridine tars are quite viscous at the temperature at which they are stored in the storage tanks. Pyridine tars would not flow to a greater distance, but rather be captured by secondary containment (wall).

The failure of the incoming gaseous feed pipeline was identified as a worst-case plausible accident scenario for either of the HAF units. This failure could be caused by seismic activity or other mechanical means (e.g. heavy equipment accident). The most significant vent feed line (in terms of concentration and composition) that could fail would be the distillation vent stream into the MS HAF unit, which has an average feed rate of 200 lb/hr and has a maximum feed rate of 600 lb/hr. The composition of the vent stream is ~70% chlorine (Cl_2) by weight (wt %), 20 wt % carbon tetrachloride, and ~10 wt % hydrogen chloride (HCl). For this accident analysis, the composition of the vent stream was assumed to be 100% Cl_2 at a 600 lb/hr feed rate and the release duration was 10 minutes.

The MS HAF also treats process vent streams consisting of other chlorinated compounds generated by various facility processes. However, these vents are fed to the HAFs sporadically and are not continuous feed streams. These other vent streams were not considered in this analysis.

The USEPA has developed look-up tables for determining the downwind distance to a specific toxic endpoint depending upon the release conditions. These look-up tables are extremely conservative and tend to greatly overestimate distances. The RMP program does not require the use of look-up tables; however, their use is simple, quick, and easily defensible. In order to be consistent with other Dow accident release planning efforts, the look-up tables were used instead of the INPUF program (which was specified in the HRA protocol). The USEPA has also developed a simple spreadsheet-based computer program, RMPComp, which is equivalent to the look-up tables provided in the RMP program guidance documents. This program was used to determine the distance to the nearest residence.

The nearest receptor to the HAF units is greater than 1.5 kilometers away. The direction toward this nearest receptor is in the direction opposite of the prevailing winds (upwind). The results of the accident analysis indicate that the downwind distance to the chlorine emergency response planning guideline level 2-toxic-endpoint is less than the distance to the nearest receptor. Therefore, exposure at the nearest receptor to emissions from an accident is unlikely to result in adverse health effects.

COMMENTS 9 THROUGH 15 WERE RECEIVED IN WRITING FROM MR. CHARLES D. SMITH.

I attended the public workshop for the above-mentioned action. Being a downwind resident of the plant's emissions, I am concerned with the environmental steps Dow takes to protect the nearby residents. Although plant's trial burns show compliance with the four 9's (99.99 %) DRE rules, there are still some questions. For example:

COMMENT 9:

Age and condition of boilers- The Dow representative mentioned that they (Dow) knew they were to be monitored. In preparation, they removed, replaced - all of the lower third bricks for one boiler. This seems a proactive bandage approach. What has been going on before?

RESPONSE TO COMMENT 9:

The MS HAF and ST HAF were originally permitted by the BAAQMD in 1978 and 1981, respectively. Dow has submitted several applications for permit modifications since then. These modifications included increases in capacity, eliminating obsolete equipment, relocating a stack, installation of new air emission abatement equipment, and some condition changes that required no physical changes. Dow is not required to apply for permits to replace components of a permitted source.

COMMENT 10:

Are these BIFs using the current best available technology for emission control?

RESPONSE TO COMMENT 10:

See Response to Comment 3.

COMMENT 11:

The samples for the trial burns do not seem fully representative of waste loads to be burned for resource recovery.

RESPONSE TO COMMENT 11:

The performance of the Symtet (ST) and Manufacturing Services (MS) Halogen Acid Furnaces was demonstrated under three operating conditions during the trial burn as follows:

Condition 1:

The objectives of this test condition were to:

- Maximize combustion temperature, pumpable feed, ash, and total Cl feed rates while minimizing scrubber pH, L/G ratios, and blow-down;

- Confirm the proposed limits for the Tier III metal feed rates;

- Demonstrate compliance with the requirement for 99.99% DRE for the POHC. (1,2-dichlorobenzene for the STHAF, and monochlorobenzene, and tetrachloroethylene for MSHAF);

- Demonstrate compliance with the emission limits for particulate matter, HCl/Cl₂, and CO;

- Set limits for maximum operating temperature, pumpable feed, ash, and total Cl feed rates, along with NaOH scrubber minimum pH, NaOH and particulate scrubber L/G ratios, and scrubber blowdowns; and

- Identify and quantify PIC emissions.

ST HAF:

The feed was 90% by weight chlorinated pyridine waste and 5% 1,2-dichlorobenzene (the POHC). The feed was spiked with POHC to demonstrate compliance with the DRE performance standard under maximum feed conditions. The ash and metal spiking mixtures, along with the anhydrous HCl vent stream, were also fed to the unit.

MS HAF:

The concentration of 1,3-dichloropropene mixed with Dowicil solvent was increased because the higher input was needed to achieve the maximum combustion chamber temperature. This feed was spiked with 0.5% of the total liquid feed rate by weight monochlorobenzene and 0.5% by weight tetrachloroethylene (the selected POHCs). The ethylene glycol and butanol used as spike carriers totaled approximately 100 pounds per hour.

Condition 2:

The objectives of Condition 2 were to:

Minimize the combustion chamber temperature to the lowest values required to maintain adequate DRE.

Create a worst-case combustion scenario intended to maximize the generation of PICs using typical waste constituents;

Identify and quantify PIC emissions;

Demonstrate compliance with the requirement for 99.99% DRE for the POHC (1,2-dichlorobenzene for the STHAF, and monochlorobenzene, and tetrachloroethylene for MSHAF) at the proposed minimum temperature condition; and

Demonstrate compliance with the CO emission limit.

The feed rate was reduced in order to lower the heat input to the system to reach the desired minimum combustion chamber temperature while the quench steam and combustion air was maximized. Typical feed was treated under operating conditions that were intended to minimize combustion efficiency (e.g., run at minimum combustion chamber temperature). Stack gas samples were collected and analyzed for the POHC (1,2-dichlorobenzene for the STHAF, and monochlorobenzene, and tetrachloroethylene for MSHAF), PICs (including VOCs, SVOCs, dioxins/furans, PCBs, PAHs, and aldehydes), THC, CO, O₂, and CO₂ during Condition 2.

ST HAF:

The chlorinated pyridine feed was spiked with approximately 15% by weight 1,2-dichlorobenzene. A lower feed rate combined with higher combustion air and steam injection rates were used to suppress the temperature in the combustion chamber. Stack gas samples were collected and analyzed for the POHC (1,2-dichlorobenzene), PICs (including VOCs, SVOCs, dioxins/furans, PCBs, PAHs, and aldehydes), THC, CO, O₂, and CO₂.

MS HAF:

The 1,3-dichloropropene fraction of the feed was reduced while the carbon tetrachloride fraction of the feed was increased. This feed was spiked with monochlorobenzene and tetrachloroethylene in order to demonstrate compliance with the DRE performance standard. The POHC was each fed at 0.7% by weight of the total liquid feed. This resulted in a POHC feed to stack gas flow rate relationship. Stack gas samples were collected and analyzed for the POHC (monochlorobenzene, and tetrachloroethylene), PICs (including VOCs, SVOCs, dioxins/furans, PCBs, PAHs, and aldehydes), THC, CO, O₂, and CO₂.

The anhydrous HCl vent stream was also fed to the units.

Condition 3:

The objectives of this condition were to:

Simulate typical operating conditions including typical waste and vent feed compositions and feed rates, operating temperature, and scrubber parameters;

Determine emissions under typical normal operating conditions;

Identify and quantify PIC emissions; and

Demonstrate compliance with the CO emission limit.

Feed rates, operating temperature, and scrubber parameters were set at typical or normal operating values. Stack gas samples were collected and analyzed for particulate matter, HCl/Cl₂, metals, hexavalent chromium, PICs (including VOCs, SVOCs, dioxins/furans, PCBs, PAHs, and aldehydes), THC, CO, O₂, and CO₂ during Conditions 3.

Because the total Cl feed is not required to be maintained at a specified level during Condition 3, the vent streams treated in the ST and MS HAF during Condition 3 were the vent streams fed during typical unit operation.

ST HAF:

The feed consisted of only the chlorinated pyridine waste stream. The total Cl fed to the ST HAF during the trial burn was supplemented by a vent stream of anhydrous HCl.

MS HAF:

The feed was Dowicil solvent. There were no POHC, metals, or ash spiked during this condition and normal process vent streams were treated in the unit.

COMMENT 12:

Dow plans to incorporate a newer Latex production into the BIF system.

RESPONSE TO COMMENT 12:

The Latex Plant Reactor is a BAAQMD permitted source. In 2000, the BAAQMD evaluated and approved a permit application from Dow to include a new Latex formulation. The HAF has adequate capacity to handle the very minor increases in process vent emissions from this project. This application required a risk screening analysis, but the increased cancer risk was found to be less than 1 in a million. Therefore, TBACT was not required.

COMMENT 13:

I understand that Dow intends to use a 10% offset in its emission control program, or more simply, 90% total emissions will be handled. Although legal, for a company that is still required to file quarterly AB 2588 reports, is not this under reporting?

RESPONSE TO COMMENT 13:

This is a BAAQMD decision, not within the regulatory jurisdiction of DTSC. According to the BAAQMD, Dow is complying with all reporting requirements.

COMMENT 14:

I question also the logic that since the quality of life is one in 100,000 for this area, Dow's compliance with the one in a million safe-level is inconsequential. Each little bit contributes.

RESPONSE TO COMMENT 14:

DTSC does not understand what is meant by "quality of life is 1 in 100,000". DTSC and USEPA both consider an additional risk of one in a million to be less than significant.

COMMENT 15:

Until Dow is removed from the **AAir Toxics®** hot list, it should undertake real level of commitment to the safety of adjacent communities. Studies and risk assessments are heavy readings for understanding but plumes speak volume.

RESPONSE TO COMMENT 15:

This **AAir Toxics®** hot list is prepared by BAAQMD and this issue would need to be addressed by that agency. AB 2588 or the Toxic Hot Spots Act applies to the entire Dow Pittsburg facility and not to a specific unit within that facility. The entire facility is subject to AB 2588. Dow must report all emissions from all equipment if the emission of a pollutant is over a reporting threshold. The reporting thresholds vary, depending on the pollutant. Dow reports throughput data each year on the BAAQMD's annual update forms. The BAAQMD uses this data to calculate the criteria and toxic pollutant emissions for each source. These emission rates are then forwarded to CARB in an annual toxics report. Dow is required to report the emission of any new toxics that are not described by the BAAQMD emission calculations. According to the BAAQMD, Dow is complying with all reporting requirements.

When AB 2588 was first adopted, each facility was given a priority score based on the site emissions, and sites with priority scores of the threshold were required to perform risk assessments. Dow was required to perform a risk assessment and was initially found to have a risk of 14 in a million. At this risk level, Dow is categorized as a Level 1 facility (risk between 10 in a million and 100 in a million). Level 1-facilities are required to perform public notification about the risk from the facility's emissions. Mandatory risk reduction measures are not required unless the facility is categorized as Level 2 or higher. Therefore, AB 2588 does not currently require Dow to reduce their risk.

Dow has submitted a revised risk assessment showing that their facility risk is less than 10 in a million. If approved, this would change Dow to a Level 0 facility and no further public notification would be required. The BAAQMD is currently reviewing Dow's risk assessment and expects to have a final decision on the matter before the end of the year.

COMMENTS 16 THROUGH 24 WERE RECEIVED IN WRITING FROM MR. MICHAEL E. BOYD, PRESIDENT, CARE, Californians for Renewable Energy, Inc. (CARE)

CARE wishes to formally object to and protest the proposed Draft Hazardous Waste Facility Boiler and Industrial Furnace Permit and Draft CEQA Negative Declaration for Dow Chemical Company (Dow) at its facility located on Loveridge Road in Pittsburg, California.

The permit would authorize the continued storage of hazardous waste generated on-site and its processing in boiler & industrial furnaces, without the required Environmental Justice analysis¹ and environmental review required under CEQA². The treatment units consist of the two boiler & industrial furnaces (also known as Halogen Acid Furnaces) and associated hydrochloric acid recovery and air pollution control systems. The relief CARE is seeking is to require the completion of an Environmental Impact Report (EIR) by the lead agency DTSC that identifies all environmental and socioeconomic impacts and their mitigation as required by CEQA. Additionally the associated federally required Environmental Justice analysis needs to be completed by DTSC³ prior to approval of the permit.

COMMENT 16:

Who is bearing the burden of environmental hazards? When it comes to environmental quality and issues of public health, not all communities are treated equally. Evidence clearly shows that communities of color suffer from a disproportionate number of environmental hazards. A recent study in Southern California showed that there are persistent racial differences in estimated cancer risks associated with ambient hazardous air pollutant exposures, even after controlling for well-known causes of pollution such as population density, income, land use, and a proxy for political power and assets (home ownership).⁴ Other studies indicate that 89% of all toxic air releases are located within 1 mile of disproportionately minority census tracts in metropolitan Los Angeles⁴ and that being a person of color in Los Angeles is the best predictor of living next to a hazardous waste treatment, storage and disposal facility.⁵ Making the situation worse by adding to the cumulative impacts of these environmental hazards are power plants like the 880 MW Delta Energy Center under construction adjacent to the proposed project site.

¹ Title VI of the Civil Rights Act of 1964 requires the California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC) to identify and address any disproportionately high and/or adverse human health, socioeconomic, or environmental impacts of their programs, policies, and actions on minority and/or low-income populations.

² CEQA is the law that allows Californians to be informed and voice their opinion about projects that may affect their environment. CEQA requires a review of the environmental impacts of projects. CEQA has a broad, strong right of public participation, which has a political component and the violation or deprivation of which has constitutional consequences.

³ DTSC is required to comply with the requirements of Title VI of the Civil Rights Act of 1964 as this agency is a recipient of Federal funding.

Morello-Frosch, Rachel, et. al. "Environmental Justice and Southern California's Riskscape: The Distribution of Air Toxics Exposures and Health Risks among Diverse Communities," in Urban Affairs Review, Vol. 36, No. 4, March 2001, pps.551-578.

⁴ Sadd, James L., et. al. "Every Breath You Take...": The Demographics of Toxic Air Releases in Southern California, in Economic Development Quarterly, May 1999, pps. 107-123.

⁵ Boer, J. T., et. al. "Is there Environmental Racism? The Demographics of Hazardous Waste in Los Angeles County," in Social Science Quarterly, Volume 78, Number 4, 1997, pps. 793-810.

Title VI regulations require project applicants to use the most recent demographic data available, by census tract, to determine the number and percentage of people of color and low-income⁶ populations living within a six-mile radius of the proposed facility. The regulations also call for maps at 1:24000-ratio, showing the distribution of people of color and low-income population, and significant pollution sources. Significant pollution sources include sites on the Environmental Protection Agency's (EPA) Toxic Release Inventory list, or those that are permitted by the California Department of Toxic Substances Control or the local air quality management district.⁷ Applicants are also required to identify and report available studies of the health status of populations within the six-mile boundary of the given plant. In this case no demographic data has been considered or provided. As the demographics of the City of Pittsburg identify the community as 64% peoples-of-color and no demographics information has been provided for public review in the draft report petitioner assumes the requisite EJ analysis has not been performed.

With all due respect, our understanding is that it is you as the administrative agency, and not CARE or other members of the public, that are responsible to conduct a full and fair investigation of matters as to which you have been put on notice by the submission of objectively-based, reasonably credible information, such as the information we are providing you.

We also understand that in order to preserve our legal rights to challenge your decision in regards to the issues of discrimination we have to notify you in advance of your decision of the alleged discriminatory practices, in this case involving a permit to authorize the continued storage of hazardous waste generated on-site and its processing in boiler & industrial furnaces, without the required Environmental Justice analysis of disparate impacts on this community-of-color. It is also our understanding that your failure to act on our notification of such discrimination may be used to establish your intention to discriminate in any ensuing judicial review. This is to formally notify you that your continued participation with the applicant in these discriminatory and illegal practices will be interpreted by CARE as admission that you also have such intent to discriminate in this regard.

RESPONSE TO COMMENT 16:

DTSC is unaware of any Arequired environmental justice analysis to be performed in association with the issuance of the DOW permit. In addition, DTSC is unaware of any discriminatory and/or illegal practices alleged to have occurred in the decision-making process. Instead, DTSC has, to the extent feasible, ensured that its decisions and actions associated with the issuance of this permit avoid adding to disproportionate environmental and/or health impacts on any affected community.

COMMENT 17:

In regard to the CEQA issues, in addition to all those previously raised, CARE provides a discussion of the nature and scope of the right of public participation provided by CEQA, and shows how foreclosing or hindering that right leads to constitutional as well as statutory violations.

⁶ ALow-income is defined as income values that are below the federal poverty level. The 2001 federal poverty level for a family of four within the 48 contiguous states and DC is \$17,650.00. SOURCE: Federal Register, Vol. 66, No. 33, February 16, 2001, pp. 10695-10697. See also, <http://aspe.hhs.gov/poverty/01poverty.htm>

⁷ California Code of Regulations, Title 20, Section 2022, (b) (4) (A, B and C).

It is CARE's position that the procedure followed in this case, where the permit is based on an ND issued by a CEQA lead agency in the absence of a CEQA and Title VI compliant environmental review process, precludes or contributes to the violation of the type of well-informed and meaningful public participation required by CEQA. Obviously, this process stands CEQA on its head. It constitutes and even goes beyond a post hoc rationalization of action previously committed to. It further confuses the public and cuts the public out of the project's approval process. This precludes and unduly interferes with that right, violating not only statutory, but also constitutional provisions.

We believe we have presented sufficient objective information and evidence to trigger a public agency's duty to further investigate and act on the matter of the persistent, ongoing inadequacy of public participation. The public must be given a full and fair opportunity to participate in all aspects of a project's administrative review proceedings. When it comes to CEQA, a lead agency doesn't have the discretion to merely rubber stamp approval of a project by issuing a permit based on a Negative Declaration when there is clear evidence of significant environmental and socioeconomic impacts of the project, which have not been properly identified or mitigated. A full and complete EIR must be required in order to meet CEQA's requirements for meaningful and informed public participation. This may reflect the reality of the situation (i.e., the public's participation is irrelevant), but it certainly does not comply with CEQA.

RESPONSE TO COMMENT 17:

Please refer to the ABackground@ Section of this document which describes what public participation activities have been conducted for this project. DTSC conducted meaningful public participation and involvement during the environmental review process established under CEQA, and worked closely with other affected agencies. DTSC provided appropriate public notice, as prescribed by CEQA, of the proposed Negative Declaration and Initial Study and is responding to public comments. The comment provides no evidence to suggest that this conclusion is inaccurate.

With respect to Title VI, the CEQA process does not require such an examination, nor does it prescribe guidelines for evaluating such complaints. The imposition of any process initiated by a Lead Agency without legal mandate and regulatory authority would be deemed arbitrary, and in violation of the due process provisions of the State Constitution. Consequently, while DTSC is aware of efforts by Cal/EPA and the USEPA to begin to establish such a legal and regulatory framework, such an examination cannot be legally undertaken under the existing CEQA or permitting processes. The comment does not provide evidence to suggest that this conclusion is inaccurate.

With respect to preparation of a Negative Declaration, as opposed to an Environmental Impact Report (EIR), it is DTSC's position that it followed the prescribed process for conducting Initial Studies as contained in the State CEQA Guidelines. Under this process, DTSC was obligated to prepare a Negative Declaration based on the facts presented in the Initial Study that demonstrated potential impacts were insignificant, less than significant, significant unless mitigated, or having no impacts. To conclude that an EIR was required is inappropriate, as well as technically and legally not consistent with CEQA or State CEQA Guidelines.

DTSC would also like to respond to the comment that "there is clear evidence of significant environmental and socioeconomic impacts of the project, which have not been properly identified or mitigated." First, as discussed above, the conclusions of the Initial Study found that environmental impacts of the proposed project are not significant based on the facts presented. The comment does not provide evidence to suggest that this conclusion is inaccurate.

Second, the Initial Study process does not require an examination of socioeconomic impacts. This is only a requirement when a Lead Agency must prepare an EIR based on finding that one or more socioeconomic impacts were found to be significant because they would lead to a significant physical change in the environment. The comment does not provide evidence to suggest DTSC's conclusion is inaccurate.

Please refer to the Background section for Past Public Participation Activities. DTSC decided to re-notice the Draft Permit and Draft CEQA Initial Study for another 45-day comment period. The public notice and fact sheet have been translated in Spanish. A public workshop and a public hearing will be held and a Spanish interpreter will be present at both the public workshop and public hearing.

COMMENT 18:

California courts have made public participation one of the strongest CEQA policies because it does both, help maximize environmental protection, while improving and lending credibility to the accompanying decision making process. This court has held that the CEQA review process "protects not only the environment but also informed self-government ... [P]ublic participation is an essential part of the CEQA process." (Stanislaus Natural Heritage Project v. County of Stanislaus (1996) 48 Cal.App.4th 182, 190 (internal quotation marks and citations omitted); see also Guidelines, ' 15201 (holding codified).)

The state Supreme Court stressed the "privileged position" the public holds in the CEQA statutory scheme, which requires that the CEQA process "be open ... [and] premised upon a full and meaningful disclosure of the scope, purposes, and effect of a consistently described project." (Concerned Citizens of Costa Mesa, Inc. v. 32nd District Agricultural Association (1986) 42 Cal.3d 929, 936.)

CEQA's right of public participation includes a political component expressed in a multitude of cases. Thus, it has been held that CEQA must be "scrupulously followed" so the basis for decision makers' environmentally significant action is disclosed. "[T]he public being duly informed, can [then] respond accordingly to action with which it disagrees..." (County of Amador v. El Dorado County Water Agency (1999) 76 Cal.App.4th 934, 941, quoting Laurel Heights Improvement Association v. Regents of the University of California (1988) 47 Cal.3d 376, 392 (the CEQA review "process protects not only the environment but also informed self-government"); see also Long Beach Savings & Loan Association v. Long Beach Redevelopment Agency (1986) 188 Cal.App.3d 249, 259 (courts look at whether the public has sufficient information to evaluate the performance of their elected officials); Laurel Heights Improvement Association v. Regents of the University of California (1993) 6 Cal.4th 1112, 1123 (informed public may thus "respond accordingly to action with which it disagrees"); People v. County of Kern (1974) 39 Cal.App.3d 830, 842 (the public will be able to take appropriate action "come election day").)

These are expressions of a political function that is the basis for the private enforcement of CEQA. Private enforcement is vital because "there appear to be no provisions for public enforcement of CEQA or of its guidelines". (Rich v. City of Benicia (1979) 98 Cal.App.3d 428, 437.) The idea is that the documentation and disclosure required by CEQA provides a record the public may use to vote ecologically insensitive decision makers out of office, and exert influence on decision makers during the CEQA review process. (See Friends of the Old Trees v. Department of Forestry (1997) 52 Cal.App.4th 1383, 1402 (public must be "given the opportunity to influence the decisions before they are made").)

RESPONSE TO COMMENT 18:

DTSC agrees CEQA must be followed so that the basis for a decision-makers= environmentally significant action is disclosed. DTSC also believes the administrative record in this permit decision provides the basis for which the public can respond to action with which it agrees or disagrees.

COMMENT 19:

"[W]here ... a statute expressly invites or allows interested persons to protest, or give their views or opinions concerning, proposed or requested governmental action, such persons singly or in combination have a lawful right to do so ..." (Matossian v. Fahme (1980) 101 Cal.App.3d 128, 136, 137.) This "right of petition is of parallel importance to the right of free speech and the other overlapping, cognate rights contained in the First Amendment and in equivalent provisions of the California Constitution ..." (City of Long Beach v. Bozek (1982) 31 Cal.3d 527, 535 ("Bozek"); see also 7 Witkin, SUMMARY OF CALIFORNIA LAW (9th ed. 1988), Constitutional Law, ' 142 at pp. 199-200.)

In addition to being embodied in both federal and state constitutions (U.S. Const., First Amend.; Cal. Const., art. I, ' 3), the right to petition and of access extend to administrative proceedings:

"In a variety of contexts, the right of access to the courts has been confirmed and strengthened throughout our 200-year history." This right of access extends to the constitutional right to petition administrative tribunals

(California Teachers Association v. State of California (1999) 20 Cal.4th 327, 335, quoting Payne v. Superior Court (1976) 17 Cal.3d 908, 911; see also Pacific Gas & Electric Company v. Bear Stearns & Company (1990) 50 Cal.3d 1118, 1135.)

Since Bozek, supra, was decided, the Supreme Court has continued to implement its strong concern for the "chilling" effect various actions may have on the right to petition. (Wolfgram v. Wells Fargo Bank (1997) 53 Cal.App.4th 43, 50-55 (comprehensive history of right).)

The freedom to associate with others for the purpose of taking political action is also a fundamental right:

"The freedom of the individual to participate in political activity is a fundamental principle of a democratic society and is the premise upon which our form of government is based."

(Fort v. Civil Service Commission (1964) 61 Cal.2d 331, 334 (unconstitutional to completely deny public employees from taking part in political campaigns and elections), quoted in 7 Witkin, SUMMARY OF CALIFORNIA LAW (9th ed. 1988), Constitutional Law, ' 187 at p. 250.)

This constitutional authority applies when the public is not allowed to fully participate in the administrative review process at a point and in a manner affording a fair opportunity to influence the decision makers politically, including by convincing the decision makers to abandon or modify the project, or locate it elsewhere.

RESPONSE TO COMMENT 19:

DTSC's administrative and CEQA process allows the public to fully participate in the administrative decision-making process at a point and in a manner affording a fair opportunity to influence the decision-making.

DTSC has conducted numerous public participation activities. Please refer to background section of this document.

COMMENT 20:

In addition to the requirements of Title VI and CEQA public participation rights CARE has identified some specific areas of concern with the proposed project as follows. This list is not meant to be exhaustive, and CARE reserves the right to raise additional concerns in the future.

The Cumulative analysis performed is inadequate as it fails to identify the cumulative impacts associated with the 880 MW Delta Energy Center and the 530 MW Los Medanos Energy center which provide steam and electricity for the DOW facility in review. The cumulative impact analysis failed to identify cumulative impacts of the air emissions from these two projects and other EPA regulated sites in determining the total impacts to the surrounding community-of-color.

RESPONSE TO COMMENT 20:

The Initial Study concluded that potential impacts from DOW facility operations would be either avoided or reduced to less than significant levels. This conclusion was based, in part, on the conclusion that no direct pathway existed from human or environmental exposure to potential sources of emissions from facility operations, except for air emissions. In this latter situation, emissions were estimated to be well below threshold standards established by the Bay Area Air Quality Management District (BAAQMD).

As a potential exposure pathway, air emissions were then examined to assess if they could contribute to a cumulative situation if combined with air emissions from other facilities in the project area. During this examination, DTSC found that the DOW facility, as well as other US EPA permitted facilities, was already included in the BAAQMD's current Air Basin Plan and, consequently, considered to be a part of the existing air quality setting. As such, the facility, as an existing operation, is already required to comply with the requirements of the Air Basin Plan that provides specific requirements that either avoid or substantially lessen the cumulative air quality problem within the San Francisco Bay Air Basin. Consequently, pursuant to the State CEQA Guidelines, DTSC made the determination that the incremental contribution of estimated emissions from DOW facility operations to a cumulative effect was not cumulatively considerable.

Further, prior to public noticing of the Initial Study, DTSC also conducted a review of both the Delta Energy and Los Medanos Power Plant (formerly named Pittsburg District Energy Facility Project) Applications for Certification (AFC) prepared as part of the California Energy Commission (CEC) power plant siting process. DTSC examined the analyses contained in the AFCs to assess potential hazardous waste related impacts from these proposed projects, from both an individual as well as cumulative standpoint. DTSC found that impacts from hazardous waste related activities from these proposed plants would be insignificant and that permit conditions of affected local and state agencies such as the BAAQMD would further ensure that impacts would fall below significance thresholds. DTSC agreed with this assessment and did not feel that

further mitigation measures were necessary beyond those described in the AFC and as subsequently required by CEC during its approval of these projects.

DTSC also reviewed the analysis of potential air quality impacts contained in both the Delta Energy and Los Medanos AFCs and found that the primary pollutant that had some form of relationship, or nexus, with those produced by the DOW BIF facility was that of NO_x . However, in both projects, the analysis indicated that total emission levels for NO_x were below levels established by the BAAQMD, and consequently were considered to be insignificant from both an individual as well as cumulative standpoint. DTSC agreed with this assessment and consequently felt that further mitigation measures were not necessary beyond those described in the AFC and as subsequently required by the CEC during its approval of these projects.

The comment does not provide evidence to suggest that the above-conclusions are inaccurate.

COMMENT 21:

The Applicant must evaluate the public health impacts of the Project to comply with the Bay Area Air Quality Management District's "Toxic Risk Management Policy" ("TRMP"). The BAAQMD's policy requires the installation of Toxics Best Available Control Technology ("TBACT") if the cancer risk is greater than one in one million or if the chronic hazard index is greater than one. Incremental cancer risk is calculated by estimating toxic emissions, modeling these emissions to estimate corresponding ambient concentrations, multiplying the modeled ambient concentration by a cancer unit risk factor, and summing over all compounds. A cancer unit risk factor expresses an individual's risk of contracting cancer for a given amount of pollutant breathed. It is expressed as the cancer risk per amount of a pollutant in a volume of air (i.e., risk per $\mu\text{g}/\text{m}^3$). Risk factors are published on the Office of Environmental Health Hazard Assessment's ("OEHHHA's") website.⁸ The Health Risk Assessment provided concluded that the upper limit of additional cancer risk at the nearest residences is approximately one in a million (1.43×10^{-6}). This exceeds the significance threshold of one in one million and requires that TBACT be installed. No such mitigation has been proposed or even considered to the knowledge of CARE. Therefore, acute and cancer impacts are significant, requiring mitigation.

RESPONSE TO COMMENT 21:

The cancer unit risk factor referred to in this question is the excess individual cancer risk per microgram per cubic meter in air which assumes that an individual is continuously exposed (24 hrs/day; 350 days/yr) at the same location for 70 years. The value shown in the comment (1.43×10^{-6}) is the upper bound cancer risk assuming 70 years of continuous exposure at the location of the maximum estimated annual average ground level concentration.

⁸ www.oehha.ca.gov

To be consistent with USEPA risk assessment guidance, DTSC conservatively assumes that a person lives at the same residence for 30 years (six years as a child + 24 years as an adult) which we refer to as a Reasonable Maximum Exposure (RME) residential exposure scenario. Under these risk assessment assumptions, the upper bound estimated cancer risk at the nearest actual residence is 0.83×10^{-6} (Table ES-1 in the HRA) which is below the generally accepted *de minimis* risk level of one in one million. The local agency BAAQMD has the authority to require a more conservative estimate of risk as they see fit in enforcing their regulations. As long as the Dow BIF units are in compliance with the BAAQMD air quality regulations, no significant cancer risks from the Dow BIF units are expected to occur.

Dow has to meet BAAQMD requirements. DTSC uses USEPA exposure factors and using these factors the risk is less than one in a million.

Like BACT, TBACT (Best Available Control Technology for Toxics) only applies to new and modified sources. The BAAQMD's Risk Management Policy (first adopted in 1987) describes when TBACT is required. TBACT is required if the emission increases from a project (which could include a source, a group of sources, or several modifications over time) result in an increased cancer risk to the maximally exposed receptor of more than 1 in a million. In most cases, the project is not allowed if the risk is greater than 10 in a million. The ST HAF has had no emission increases since 1987 and so has never been subject to the BAAQMD's Risk Management Policy or to TBACT. The ST HAF has had no emission increases that would trigger a risk screen, but a 1991 permit application included a relocation of a stack from the MS HAF, which could have an impact on risk. In 1991, the emissions from the MS HAF were found to result in a risk of less than 1 in a million and TBACT was not required.

Dow's most recent risk assessment for these units indicated a maximum increased cancer risk of 1.43 in a million (for both units combined). If these two units were permitted as new sources today, this risk level would require the use of TBACT. These units are required to achieve 99.99% control for volatile organic compounds. This level of control would be considered TBACT for control of toxic VOCs today. However, the biggest contributors to this risk are toxic metals and semi-volatile/non-volatile organic compounds. BACT for particulate control is generally an emission rate of less than 0.002 grain/dscf at 12 % CO₂. The MS HAF and ST HAF are not meeting this particulate emission rate during all operating modes. Therefore, the particulate control measures currently being use may not qualify as TBACT for control of toxic particulate matter today. However, as stated before, neither the MS HAF nor the ST HAF are required to have TBACT, because the units were installed before the BAAQMD's Risk Management Policy was adopted and have had no emission increases since the policy was adopted.

Title V is the Federal Operating Permits Program that is required by the 1990 amendments to the Federal Clean Air Act. The BAAQMD implements the Title V program through our Major Facility Review Rule (Regulation 2, Rule 6) and through MFR permits. Dow is required to obtain a Title V/MFR permit and has submitted all necessary application materials. The BAAQMD is currently evaluating their application and expects to issue the first draft of their MFR Permit later this year. Title V does not impose any new or more stringent emission limits. Therefore, Title V cannot be used to impose TBACT on the HAFs. Under Title V, the BAAQMD can state limits that are currently in effect and add monitoring for these limits if none exists. For the HAFs, it is likely that the BAAQMD will explicitly state in permit conditions several emission limits that are currently in effect but are not explicitly stated in a BAAQMD permit condition. The BAAQMD is also likely to add monitoring requirements for these HAFs. Monitoring can include records, source testing,

monitoring of operating parameters, or combinations of these. The BAAQMD determines the appropriate monitoring frequency, which is typically annual, monthly, daily, or continuous. Monitoring does not necessarily mean having a continuous emissions monitor (CEM). The BAAQMD cannot require new control equipment or more stringent toxic emission limits.

COMMENT 22:

To estimate actual emissions of constituents of concern for input into a Health Risk Assessment (HRA) and to establish operating conditions for the Halogen Acid Furnaces, trial burns were conducted between October 1999 and March 2000. The trial burn purportedly defined worst-case operating conditions for the HAF units and demonstrated that the units can meet air emission standards for this wide range of operating conditions. Both halogen acid furnaces produce hydrochloric acid by thermal oxidation at temperatures between 1,000 degrees Centigrade (EC) and 1,500 EC. The HAF units have destruction and removal efficiencies (DREs) greater than 99.99%. This means that 99.99% of feed waste constituents are converted to hydrochloric acid, water, and carbon dioxide. The primary air contaminant of the HAF units is identified as nitrogen oxides. CARE objects to the applicant's failure to require Continuous Emission Monitoring (CEM) of the HAF units for NO_x and HCl constituent emissions. Apparently different mitigation and monitoring is being proposed for this project than those provided for in the Delta Energy Center and Los Medanos Energy Center Application for Certification process. No CO catalyst is proposed for control of CO emissions.

RESPONSE TO COMMENT 22:

The CO emissions from the HAFs are less than 10 pounds/day each. CO catalysts are not required for such low emission rates.

The BAAQMD requires continuous emission monitors (CEMS) for NO_x emissions only under certain circumstances. Regulation 1-520 requires CEMS for boiler and steam generators if the equipment capacity is 250 MM BTU/hour or more. Large nitric acid plants (300 tons per day or more) are also required to have NO_x CEMS. Regulation 9-9-501 requires NO_x CEMS for 10 MW or larger Gas Turbines, which generally have capacities of more than 100 MM BTU per hour. The MS HAF and ST HAF capacities are 5 MM BTU per hour and 3 MM BTU per hour, respectively, with NO_x emissions of less than 10 pounds per day and less than 20 pounds per day, respectively. CEMS would not be appropriate for such low capacity sources with these levels of NO_x emissions.

COMMENT 23:

To determine the actual worst-case emissions for the project the applicant must re-evaluate the worst-case scenario in lights of the events of September 11, 2001. This worst-case scenario must include possible terrorist attack or acts of war against the facility. This must include the firing of incendiary devices at the

facility's furnaces, pipelines, storage tanks, and tanker rail cars that may service the facility. This analysis must include possible attack and explosion at the following three facilities:

- * Liquid Hazardous Waste Storage Tanks T-501B and T-502A: These two tanks store liquid hazardous waste feed that is processed in the ST HAF unit. The volume of each tank is approximately 15,000 gallons.
- * Waste Storage Tank T-12: This tank stores liquid hazardous waste that is processed in the MS HAF unit. The volume of the tank is approximately 3,750 gallons.

RESPONSE TO COMMENT 23:

Please refer to the Response to Comment 8 regarding plausible scenarios that were considered in the risk of upset analysis (as part of the Health Risk Assessment). It should be noted that access by the public to the hazardous waste units is restricted by high security fence and guard system. Hazardous waste units are over 500 feet from the fence line.

In the event of catastrophic incident such as firing of incendiary devices, the probability of them hitting these hazardous waste units amongst all the facility equipment within Dow does not appear to be plausible. However, in the event of incident involving explosion with incendiary devices and associated fires, Dow has an onsite 24 hour, 7 day a week fire fighting crew available. In addition, the facility has an arrangement with the local fire department of rapid response in the event of such an incident.

COMMENT 24:

CARE is seeking to require the completion of an Environmental Impact Report (EIR) by the lead agency DTSC that identifies all environmental and socioeconomic impacts and their mitigation as required by CEQA. Additionally the associated federally required Environmental Justice analysis needs to be completed by DTSC prior to approval of the permit.

RESPONSE TO COMMENT 24:

Please refer to Responses to Comments 17 & 20.

COMMENT 25 WAS RECEIVED IN WRITING FROM MR. JEAN C.R. FINNEY, DISTRICT BRANCH CHIEF, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION

COMMENT 25:

The Initial Study /Negative Declaration indicate that truck volume along State Route (SR4) in the project area and along Loveridge Road constitutes approximately 7% to 9% of the total volume. Please clarify further how many additional truck trips per day this project will add to SR4.

RESPONSE TO COMMENT 25:

Truck traffic volume along SR4 in the project area and along Loveridge Road constitutes approximately 7 to 9% of total traffic volume. This equates to 850 to 1,050 trucks per day along Loveridge Road and 3,650 to 4,700 trucks per day along SR 4 in the vicinity of the facility. Of these truck traffic trips, approximately 4% are expected to be handling hazardous materials, based on studies performed by the Association of Bay Area Governments. Currently, Dow's Pittsburg facility accounts for 14,300 truck trips per year and 2,600 rail trips per year.

The proposed project will not increase the number of vehicle or rail trips to or from the Pittsburg facility and thus will have no impact on traffic or transportation patterns.

**COMMENTS 26 THROUGH 35 WERE MADE BY JAMES MACDONALD DURING
SECOND PUBLIC HEARING HELD ON NOVEMBER 8, 2002.**

MR. MacDONALD: Hi. My name is James MacDonald. MacDonald is capital-M-a-c-capital-D-o-n-a-l-d. I'm currently a trustee of the Pittsburg Unified School District, on the board of directors of CARE, which is Californians for Renewable Energy, Incorporated. I'm here tonight representing CARE, not the school board, and myself.

Okay. CARE is in the process of preparing written comments on the project.

COMMENT 26: EIR

We have reviewed your response to comments. **We are not satisfied in that they still are failing to recognize their duties under CEQA to complete an EIR on the project.**

RESPONSE TO COMMENT 26:

It remains DTSC's position that a Mitigated Negative Declaration was the appropriate document to prepare based on the facts and conclusions contained in the Initial Study and supporting documentation.

COMMENT 27: EJ ANALYSIS

Additionally, **you've failed to recognize their duties under Title 6 and Executive Order 12898, to perform an EJ analysis on the project.** This document provides collaborative evidence of the state's recognition of its EJ responsibilities under CEQA. We are not wanting to litigate this matter, but **if you don't complete an EIR on this project, we may be forced to file suit against the California Department of Toxic Substances Control for violating CEQA, and we certainly will file a Title 6 complaint against DTSC as a recipient of USEPA funds.** And the document that I was referring to is a letter, Air Resource Board, and I'm sorry, I'm going to butcher this person's name, so I'm just going to spell it out. This is from the Senior Staff Counsel for the Air Resources Board, L-e-s-l-i-e, K-r-i-n-s-k. It's dated March the 8th, 2002. This is a response to a question that was put to them about CEQA and environmental justice. And it basically states the fact that **you are required to do an environmental justice analysis, and the State of California recognizes that fact.** So I'd like to give -- this document is approximately 14 pages in length, so who do I hand this one to?

PUBLIC PARTICIPATION SPECIALIST CRUZ: To the Project Manager, Waqar.

MR. MacDONALD: The Project Manager.

PUBLIC PARTICIPATION SPECIALIST CRUZ: Thank you.

RESPONSE TO COMMENT 27:

DTSC has fully complied with the requirements of the California Environmental Quality Act (CEQA) and Title VI. DTSC's risk assessment procedures account for the possible health effects on particularly sensitive segments of the population exposed to risk such as the very young, very old, or infirm. The profile

determined the surrounding community consisted of a population of 29 percent Latinos, 20 percent African-Americans, 3 percent Asian Americans, and 48 percent White. As a result of this data, DTSC translated documents into Spanish, and held a second public meeting with a Spanish translator available. The comment does not provide evidence to suggest that this conclusion is inaccurate.

DTSC is committed to compliance with federal and state environmental justice goals and policies and has incorporated environmental justice principles within its public outreach program. DTSC's draft policy on environmental justice can be found on its website: http://www.dtsc.ca.gov/PolicyAndProcedures/env_justice/env_justice_policies.html. All boards, offices, and departments under Cal/EPA "shall conduct their public health and environmental protection programs, policies and activities in a manner that is designed to promote equality and afford fair treatment, full access and full protection to all Californians, including low income and minority populations."

Recently enacted legislation requires each board, department and office within Cal/EPA to review its programs, policies and activities to identify and address program obstacles impeding the achievement of environmental justice. In order to assist in this review, DTSC has appointed its own Environmental Justice coordinator.

The ARB memorandum you cite concludes only that the CEQA process is but one avenue that may be used as a vehicle to achieve the environmental justice goals of the State and federal government. The memorandum is entirely consistent with DTSC's determination in this case.

COMMENT 28: WORSE CASE SCENARIO OF TERRORISM

MR. MacDONALD: **You have failed to do a worst case scenario of terrorism.** I want to submit for the record this newspaper article, "Attack on Chemical Plants Could Kill 2.4 Million People." It outlines the fact that chemical plants are probably the number one target of terrorists. I wish this to be entered into the record.

RESPONSE TO COMMENT 28:

As the Department stated in our previous responses to Comments 8 and 23, the plausible worst-case scenarios were evaluated. We do not consider the scenario of a terrorist attack focused only on two BIF units within the entire company complex as a viable i.e. plausible scenario. The BIF units do not pose any more risk in the event of a terrorist attack than any other manufacturing unit within the Dow Chemical Company complex. It is not plausible that these BIF units would be the unique target of a terrorist attack. These BIF units operate under vacuum (low pressure) conditions, whereas other plant equipment operates under high pressures which could result in releases of greater volume. Dow prepared a risk management plan that addresses entire facility in the event of accidental release scenarios. Note that this risk management plan is not prepared under the regulatory oversight of DTSC. Instead, it is prepared under the guidance of a local agency (Contra Costa County Department of Environmental Health).

See Responses to Comments 8 and 23.

COMMENT 29: BAAQMD CONDUCTS FAULTY EJ CERTIFICATION

I know that during the workshop, that some of the comments were made by staff that the Bay Area Quality Management District is responsible, to some extent, or maybe a large extent, for doing the environmental justice. CARE would agree that, in fact, the Bay Area Quality Management District is responsible for doing the environmental justice. In that respect they are the lead agency, because they are the ones that are certified by the USEPA to do those analyses. You, as lead agency in this particular case, are required, because you receive federal funds, to acknowledge the environmental justice aspects of the Bay Area Quality Management District's certification. **I believe that their certification is faulty. We are asking you to review their certification process and to return this back to the Bay Area Quality Management District to do a proper environmental justice analysis, so that you will have the information necessary to make appropriate decisions.**

RESPONSE TO COMMENT 29:

DTSC has no authority to "second-guess" the Bay Area Air Quality Management District (BAAQMD) certification process or the authority to "return" the certification to the BAAQMD on the basis an inadequate environmental justice analysis was performed.

COMMENT 30: SMOG EPICENTER

This article is from the Times, Friday, May 31st, 2002, "Groups Vow to Sue EPA over Smog Standards". In this article they are quoting Peter Hess, Deputy Pollution Control Officer for the Bay Area Quality Management District. And this article, and I'm quoting the article, they're talking about new eight-hour limits likely will shift the smog epicenter of the Bay Area from Concord to Livermore to the east, including Concord, but also more eastern areas such as Fairfield, Pittsburg, Bethel Island. The new standard is a much better standard. It's more productive to public health and long-term smog exposures to children playing outdoors. The areas -- they're talking about the areas, they're talking about Pittsburg and Bethel Island -- get large amounts of pollution, dirt, from cities and industries.

So here is a officer of the Bay Area Quality Management District publicly saying that the air pollution in the Pittsburg area is greater than the rest of the Bay Area. Even though I think you'll find that their testimony that they are giving to you is that there is no difference in the air quality in Pittsburg, compared to the rest of the Bay, their testimony is inconsistent.

I would like to, for the record, this is a map that was compiled by the Pittsburg Unified School District, a revised map of 3/26/02 that shows the concentrations of minority elementary age children. In particular, I'd like to draw your attention to an area that's marked Martin Luther King, which is about one mile from the proposed project. It shows 133 African-Americans, 12 Caucasians, 105 Hispanics, and 30 others. **Clearly, it's a minority population that's well within the boundaries of being affected. Martin Luther King is currently a pre-school program, which is a low income program. And these have not been taken into the record.**

RESPONSE TO COMMENT 30:

The intent of this comment is unclear. The last statement regarding racial demographics in school children has been discussed in other Responses related to the Environmental Justice comments. From a health risk

perspective, there is no direct evidence that minority children are genetically more susceptible to health effects from hazardous air pollutants than non racial minority children. Where differences have been reported, socioeconomic and environmental factors have generally been the most significant causative agent, with poverty being the greatest risk factor of all.

The comment that air pollution in the Pittsburg area in general may be increasing or is greater than in other local communities may or may not be true.

COMMENT 31: HEALTH ANALYSIS NOT GEARED TOWARDS CHILDREN

This is a article from the Times, "Pushing Cancer Risks Higher for Kids". **We all have a concern about how the basic health analysis was done, because most health analysis that we're aware of are geared towards adult males, and not children.**

RESPONSE TO COMMENT 31:

The USEPA and DTSC health risk assessment process does evaluate potential harmful health effects in children. Specifically, DTSC requires that separate estimates of non-cancer health effects be considered for children from 0-6 years of age. These estimates of non-cancer hazard use exposure factors developed specifically for this age group recognizing that children may have greater exposure rates per body size than adults, including breathing rates and outdoor soil contact rates. The HRA concluded that no significant non-cancer health effects in children residing in the local area would be expected to occur.

The HRA does not predict separate cancer risks for children. Potential cancer risks to children are included in the overall estimate of cancer risk for a residential exposure setting by assuming a thirty year exposure period with 0-6 years of childhood exposure followed by 24 years of adult type exposures. The cancer risk estimates are weighted to include the higher specific exposure rates of young children. Since the estimated cancer risk at the location where off-site impacts are predicted to be the greatest is less than one in one million for the assumed 30 year exposure duration, estimated risks for the childhood portion of this risk estimate will be considerably less.

COMMENT 32: ALTERNATE DISPUTE RESOLUTION WITH BAAQMD REGARDING ENVIRONMENTAL JUSTICE

Also, I'd like to put into the record, currently CARE is in a alternative dispute resolution with the Bay Area Quality Management District, California Air Resources Board, and who knows who else, but those are the two major --EPA. **This is a guidance that we're suggesting be used as far as environmental justice.** The cover page is kind of a informational page on health effects on children. There's also specific information on Websites. **I'd like all that information included in, in the record.**

RESPONSE TO COMMENT 32:

It is noted that the commenter provided information on Asthma Information Center, National Resources Defense Council, America's Second harvest, Contra Costa Times, and the California ad Pittsburg Unified School District. This information is included in the administrative record for this project.

COMMENT 33: COPY OF DTSC COMMUNICATIONS WITH EPA REGARDING ENVIRONMENTAL JUSTICE ISSUES.

And I believe if you look at the outline of the environmental justice requirements, and I think you can find that, in fact, **Bay Area Quality Management District did little or none of these analysis.** During the workshop, staff acknowledged the fact that the USEPA made a finding that, in fact, that Pittsburg is a environmental justice community. **CARE requests all communications, information given to the EPA relating to that finding, how the EPA came up with that finding, how the EPA notified -- notified you of that finding, and including e-mails.**

RESPONSE TO COMMENT 33:

DTSC is providing a copy of the information that USEPA provided to DTSC as an attachment to this Response to Comments document (see Attachment 1).

COMMENT 34: COPY OF THE PUBLIC PARTICIPATION AND PROCEDURES MANUAL

I'm going to refer to this report by name, I unfortunately don't have a copy and I don't think there's a copy machine here, **California Environmental Protection Agency, Environmental Justice Program, Progress Report, 1999 to 2002.** This came out in April of 2002. Under here, they outline different areas that different departments are supposedly working on. On page 7, they talk about the Department of Toxic Substances Control. Department of Toxic and I'm quoting, the Department of Toxic Control Substances, DTSC, DTSC incorporated environmental justice into its public participation policies and procedures manual. This is to be used by DTSC staff in the clean-up, site mitigation and site characterization process. DTSC has developed draft environmental justice policies and procedures to provide a framework by which DTSC incorporates environmental justice into its program. Currently, DTSC is seeking public input prior to the finalizing of this policy. **CARE wishes to get a copy of this draft.** Okay.

RESPONSE TO COMMENT 34:

DTSC's draft environmental justice policy is currently open for public comment, however, the Public Participation Policy and Guidance Manual is in final form. Many elements of the Public Participation Manual pertain to environmental justice, particularly in the area of community assessment, translation, interpretation, and accommodation at community events or meetings. This manual is a guide for DTSC staff when they are conducting a permitting, corrective action, closure, or cleanup activity. It incorporates requirements under state and federal law, as well as guidance and direction on how to conduct outreach activities. DTSC will mail a copy of the manual and the draft environmental justice policy to you. Both are available on DTSC's website: www.dtsc.ca.gov.

COMMENT 35: DTSC NOT FOLLOWING ITS OWN EJ GUIDELINES

DTSC has hired a full-time environmental justice coordinator. This position will be used to develop in-house training, external coordination with other agencies -- and I, and I stress that, other agencies -- and dialogue with communities where EJ is an issue. **CARE contends that you have, in fact, not followed your own guidelines.** And I think that's the extent of our comments. Thank you.

RESPONSE TO COMMENT 35:

DTSC respectfully disagrees with the assertion that its EJ coordinator is not following DTSC guidelines. Our public participation specialist has been in contact with the EJ coordinator regarding community outreach for this project. Please refer to public participation activities section of this document that describes these community outreach activities after the first public comment period.

COMMENTS 36 AND 37 WERE MADE BY MONICA WILSON DURING

MS. WILSON: My name is Monica Wilson, W-i-l-s-o-n. I'm with an organization called GAIA, it's the Global Alliance for Incinerator Alternatives. I personally am based in Berkeley, California.

COMMENT 36: CHLORINE CONTENT OF THE WASTE AND DIOXIN:

GAIA is particularly **concerned about the chlorine content of the waste to be treated in these burners.** Burning these wastes will cause dioxin among other dangerous chemicals and pollutants. Dioxin is classified as a persistent organic pollutant under the 2001 Stockholm Convention, of which the US is a signatory. The Stockholm Convention calls for the eventual elimination of dioxin. As you know, dioxin and other persistent organic pollutants are transported globally and impacts people globally, not just in the immediate vicinity. **Therefore, release of dioxin and other persistent organic pollutants cannot be seen in isolation, facility by facility, but must be seen in total to realize their impact on human health.** The impacts of dioxins particularly include cancer, immune system toxicity, reproductive system toxicity, and developmental system toxicity. As you know, dioxins and persistent organic pollutants accumulate in human bodies through the food chain, and are passed on to infants through breast milk. According to the USEPA, in 2000, the risks of cancer due to dioxin were as high as one in 100 in the general population. And I'm sure you'll agree that any increase in dioxin releases or any other persistent organic pollutants from any facility are an unacceptable risk to human health.

RESPONSE TO COMMENT 36:

The issue of cumulative effects from multiple sources is a CEQA issue. The health risk assessment does evaluate both non-cancer and cancer risk from dioxins and furans, including potential exposures from breast milk. The HRA concludes that the cancer risk attributable to emissions from the Dow BIFs is less than one in one million for assumed 30 year exposure duration. We agree that people are exposed to dioxins and furans from a variety of sources, and that the overall cancer and/or non-cancer health effects include the contribution from both the Dow BIFs and other sources. However, there is not sufficient information to separate out the effects due to emissions from Dow vs. other sources.

COMMENT 37: EIR

Finally, I **urge the DTSC to perform, or to require the performance of an EIR.**
Thanks.

RESPONSE TO COMMENT 37:

It remains DTSC's position that a Mitigated Negative Declaration was the appropriate document to prepare based on the facts and conclusion contained in the Initial Study and supporting documentation. The comment does not provide information to demonstrate what proposed facility activities would result in significant and unavoidable impacts that would warrant preparation of an EIR.

COMMENTS 38 THROUGH 50 WERE SENT BY MS JULIA MAY, COMMUNITIES FOR A BETTER ENVIRONMENT BY E-MAIL.

COMMENT 38A:

Dear Mr. Ahmad:

On behalf of its numerous members living in and around the City of Pittsburg, Communities for a Better Environment ("CBE") opposes DTSC's decision not to prepare an environmental impact report (EIR) under the California Environmental Quality Act (CEQA) for The Dow Chemical Company (Dow) Boiler and Industrial Furnace (BIF) Permit in Pittsburg, California.

RESPONSE TO COMMENT 38A:

See RESPONSE TO COMMENT 37.

COMMENT 38B:

In the current project, DTSC is proposing to issue Dow a permit that would allow storage and incineration of hazardous waste. On this same site, Dow is also attempting to develop a new pesticide production operation to double its current capacity. To make matters worse, the Dow site that is housing both projects is located within a mile earthquake fault line. Despite these two compelling facts, DTSC is inexplicably attempting to sidestep its environmental review responsibilities under CEQA. This is not only a flagrant violation of the statute, but demonstrates a shocking disregard for the public's right to be fully informed and participate in decisions, such as this, that affects their health and environment.

RESPONSE TO COMMENT 38B:

Discussion with City Planning staff indicates that all toxic emissions from the new SF plant will be lower than those at the existing plant. However, the capacity of the new pesticide production facility is greater than the existing facility.

The Initial Study prepared by DTSC acknowledges that the facility is located in a seismically-active area of Northern California, and that "as a result of proximity to several faults in the region the site is expected to experience strong ground motion as a result of a moderate size earthquake in the vicinity or a major strong motion earthquake with an epicenter located some distance away." The existence of an earthquake fault line within 1 mile of the facility does not change this finding. Further, the existence of this new information does not bring up additional new impacts because the Health Risk Assessment already concluded that releases might occur as a result of earthquakes, but that releases of any constituent of concern to a maximum exposed individual were projected to be less than significant.

It also remains DTSC's position that the public participation and involvement process conducted as part of the draft Mitigated Negative Declaration and draft permit review processes were consistent with guidelines and procedures required under CEQA, the State CEQA Guidelines and the Health and Safety Code Chapter 6.5. These guidelines and procedures were designed allow the public an opportunity to fully and meaningfully participate in the CEQA process and to assure the public that the environment and public

health are protected.

Also, see RESPONSE TO COMMENT 46B concerning the DTSC's availability and subsequent review of the City of Pittsburgh Initial Study and draft Mitigated Negative Declaration.

COMMENT 38C:

DTSC has reissued without modifications and reopened for public review the Initial Study and Preliminary Negative Declaration (Dow BIF PND) which was prepared and appealed a year ago. DTSC's "Response to Comments, Dow Chemical Company, Pittsburgh, Hazardous Waste Facility Boiler and Industrial Furnace permit and CEQA Negative Declaration" (September 20, 2002) (BIF Responses) do not fully respond to many of the potentially significant environmental which were identified a year ago concerning the 2001 Dow BIF PND. Moreover, CBE has identified other potentially significant environmental impacts regarding the Dow BIF PND which has been reopened for public comment through November 8, 2002. In particular, the Dow BIF PND is deficient in its identification and analysis of potential air quality, geologic, hazardous materials, and risks of upset affecting public safety.

In addition, the proposed DTSC permit for Dow's BIF represents the latest in a series of piece-mealing actions which are impermissible under the CEQA. Finally, DTSC fails to appropriately define and consider the potential for adverse cumulative impacts for this project in relation to other nearby projects.

RESPONSE TO COMMENT 38C:

Also see RESPONSE TO COMMENT 26:

COMMENT 38(D):

A Full Environmental Impact Report is Required by CEQA. CEQA Requires the Fullest Possible Protection of the Environment

CEQA must be interpreted to "afford the fullest possible protection to the environment within the reasonable scope of the statutory language." Friends of Mammoth v. Bd. of Supervisors, 8 Cal.3d 247, 259 (1972). CEQA provides that the City may issue a Negative Declaration only if "[t]here is no substantial evidence before the agency that the project may have a significant effect on the environment." Public Res. Code section 21080(c)(1). An EIR is required whenever substantial evidence in the record supports a "fair argument that significant impacts may occur." Section 21080; Laurel Heights Improvement Assoc. v. Regents of the Univ. of Calif., 6 Cal.4th 1112, 1123 (1993). The "fair argument" standard creates a "low threshold" for requiring preparation of an EIR, Citizens Action to Serve All Students v. Thornley, 222 Cal.App.3d 748 (1990). Because issuing a negative declaration has a terminal effect on the environmental review process, an EIR is necessary to resolve "uncertainty created by conflicting assertions" and to "substitute some degree of factual certainty for tentative opinion and speculation." No Oil, Inc. v. City of Los Angeles, 13 Cal.3d 68, 75 (1975). Therefore, CEQA mandates that the City as lead agency must require the preparation of an environmental impact report (EIR) to fully analyze the nature of those impacts as well as measures to reduce or eliminate those impacts. Quail Botanical Gardens v. City of Encinitas, 29 Cal.App.4th 1597 (1994). An agency's decision not to require an EIR can be upheld only when there is no credible evidence to the contrary. Sierra Club v. County of Sonoma, 6 Cal.App.4th, 1307, 1318 (1992).

RESPONSE TO COMMENT 38D:

This comment appears to relate to the City of Pittsburg local land use and CEQA processes. Comment noted.

Also, see RESPONSE TO COMMENT 37.

COMMENT 39: An EIR is Required Because Substantial Evidence Supports a Fair Argument that Dow's BIF Project will have a Significant Effect on the Environment

Approval of the Proposed Mitigated Negative Declaration ("Proposed Negative Declaration") for Dow's hazardous waste storage and incineration project would violate the requirements of the California Environmental Quality Act ("CEQA"). California Public Resources Code section 21000, et seq. As discussed below, **CEQA requires the preparation of an environmental impact report (EIR) for the Dow BIF Project in order to allow the public an opportunity to fully and meaningfully participate in the CEQA process and to assure the public that the City is adequately protecting the environment and public health.**

RESPONSE TO COMMENT 39:

It remains DTSC's position that the public participation and involvement process conducted as part of the draft Mitigated Negative Declaration and draft permit review processes were consistent with guidelines and procedures required under CEQA, the State CEQA Guidelines and the Health and Safety Code Chapter 6.5. These guidelines and procedures were designed to allow the public an opportunity to fully and meaningfully participate in the CEQA process and to assure the public that the environment and public health are protected.

Also, see RESPONSE TO COMMENT 37.

COMMENT 40: II. (A) DTSC Fails to Adequately Evaluate Potentially Adverse Air Quality Impacts. The Initial Study Does Not Provide Sufficient Information to Support the Conclusion that NO_x Emissions from the Proposed Project are "Not Significant"

The Dow BIF PND discusses criteria pollutants regulated by the Bay Area Air Quality Management District (BAAQMD) as well as toxic hot spots, fugitive emissions, test burn results, and a health risk assessment which was conducted. **The inadequacies in DTSC's negative declaration are in the quality of the analysis provided and in the unsupportable conclusions made as a result of the defective analysis.**

For example, **the Dow BIF PND acknowledges that the project would generate substantial amounts of nitrogen oxides (NO_x), a criteria pollutant for which the Bay Area fails to attain federal and state air quality standards. DTSC concludes that the project's NO_x contribution would be insignificant, apparently because the amount would be within the levels allowed under Dow's existing BAAQMD permit and would be "quite small" as representing about one percent of the Bay Area daily total.** A similarly dismissive approach is evident in DTSC's BIF Response regarding air quality raised last year for this project.

California's appellate courts have clearly determined that **a project's incremental contributions to adverse regional air quality conditions cannot be dismissively characterized.** The appellate court in Kings County Farm Bureau v. City of Hanford (1990) 221 Cal. App. 3d 692, 718, 270 Cal. Repr. 650, ("Kings County") determined that the City of Hanford had improperly characterized a project's small contribution of ozone precursors as insignificant despite serious ozone problems in the air basin. In Communities for a Better Environment v California Resources Agency (2002) Cal. App. Lexis 4867 at 39, the appellate court cited Kings County and related cases, e.g., Los Angeles Unified School Dist. v. City of Los Angeles (1997) 58 Cal. App. 4th 1019, 1024-1025, 68 Cal. Rptr. 2d 367, and emphasized that "the greater the existing environmental problems are, the lower the threshold should be for treating a project's contribution to cumulative impacts as significant."

The proposed project's generation of NO_x represents one percent of the regional daily total for a criteria pollutant for which federal state standards have not been attained. This amount cannot be implicitly dismissed as *de minimis* and represents a potentially significant air quality impact, especially when considered in conjunction with Dow's new pesticide production proposal on the same site.

In another document, **the DTSC contradicts the above conclusion of "*de minimis*" NO_x emissions by stating that when a test burn of the incinerator took place, "SO₂ and NO_x were not tested for."** DTSC's Response to Comments, September 20, 2002, Response to Comment #3, p.7. This is surprising given that NO_x emissions are a common result of the combustion process. **DTSC goes on to say that the NO_x emissions from the units are limited by BAAQMD permits. Unfortunately, the permitted level of emissions from a particular unit is not determinative of the "possible" level of emissions from that unit. Under CEQA, the measure of significance is not based on the permitted level of emissions, but the possible level of emissions from that unit, or the environmental impact that "may" occur due to the project.** Laurel Heights Improvement Assoc. v. Regents of the Univ. of Calif., 6 Cal.4th 1112, 1123 (1993).

RESPONSE TO COMMENT 40:

Also, see Response to Comment #37.

Please refer to Section 3.1 of CEQA Initial Study. This section does not acknowledge that the project would generate substantial amount of nitrogen oxides. NO_x emissions from the two BIF units combined amount to approximately 2 tons per year. This quantity is within BAAQMD permit limit of 5 tons per year. DTSC respectfully disagrees that we have been dismissive of air quality issue. The commenter asserts that 2 tons per day generated represents 1% of 500 tons per day (regional daily total). The determination of *de minimis* levels of NO_x is under the jurisdiction of BAAQMD. They have set the limit of 5 tons per day. The emissions from Dow Units are 2 tons per day. Similarly, BAAQMD would evaluate air permit associated with new pesticide production plant proposal on the Dow site.

COMMENT 41: The Project's Increase in Particulate Matter Pollution, Combined With the Potential Increase of PM₁₀ Pollution from the Pesticide Plant Is A Significant Impact, Triggering CEQA's EIR Requirement

Dow's pesticide Plant is projected to emit 79 additional pounds per day of PM₁₀ pollution over 2001 levels. See Exhibit A. When pre-2001 emission levels (4.7 lbs/day) are averaged with the 2001 emission levels (24 lbs/day), the increase in particulate matter pollution crosses the significance threshold of 80 lbs/day under the Bay Area Air Quality Management District's CEQA Guidelines. See Exhibit B. This potential impact

alone triggers CEQA's EIR requirement. **The significant impact of the anticipated particulate matter pollution from the pesticide plant, coupled with the increase in particulate matter pollution from the BIFs⁴, provide an even stronger need for full environmental review in an EIR, as required by CEQA.**

CBE notes that DTSC failed to provide all the necessary information to determine the potential increase in PM₁₀ emissions. Specifically, although the initial study provides concentration levels for particulate pollution (p.11) from one of the units, the initial study fails to provide the flow rate capacity of that incinerator. Without those flow rates, potential emissions cannot be calculated. This is an inadequate project description under CEQA.

RESPONSE TO COMMENT 41:

Also, see Response to Comment 37.

The USEPA and DTSC health risk assessment process does not evaluate non chemical-specific PM₁₀ concentration separately for risks or hazards. Our risk assessment process uses chemical-specific estimates of exposure coupled with chemical-specific toxicity criteria to evaluate potential health risks.

COMMENT 42: Impact of Hydrogen Chloride Must Be Studied in an EIR

The project may result in increased emissions of hydrogen chloride (HCl). This increased level of emissions, coupled with the potential increase in HCl from the new pesticide plant on the same site is potentially significant. Under CEQA, these impacts must be studied in an EIR.

RESPONSE TO COMMENT 42:

It remains DTSC's position that the impacts associated with HCL were adequately analyzed in the Initial Study and Mitigated Negative Declaration and that adequate mitigation measures were incorporated so as to reduce impacts to less than significant levels.

It should be noted that the CalEPA Office of Environmental Health and Hazard Assessment (OEHHA) has recently developed new toxicity criteria specifically for HCl which were not available when the HRA was originally prepared. The OEHHA acute reference exposure level (REL) of 2100 µg/m³ and chronic REL of 9 µg/m³ are regulatory limits enforceable by the Calif. Air Resources Board under the Air Toxics Hot Spots legislation (AB 2588). The BAAQMD is supposed to evaluate these emissions for regulatory compliance.

COMMENT 43: The Initial Study Fails To Discuss Potential Dioxin Releases

Although the initial study discusses project's anticipated incineration of chlorinated compounds, it does not discuss the potential for dioxin formation and the potential impact of dioxin on human health and the environment. This makes the initial study incomplete under CEQA and the resulting negative declaration illegal.

⁴The initial study estimates a potential increase of PM pollution from only one of the units (MS HAF) to be 0.08 gr/dscf). See CEQA Initial Study for the BIF project, p. 11.

RESPONSE TO COMMENT 43:

Also, see Response to Comment 37. The human health risk assessment prepared for the EIR did specifically evaluate dioxins and furans and concluded that non-cancer health effects and cancer risks were not significant.

COMMENT 44: DTSC Fails to Recognize and Mitigate Known Geologic Risks from Seismic Events.

In the Initial Study prepared by the City of Pittsburg for a new pesticide plant at the same Dow facility, geological problems are identified as having a potentially significant impact which warrant mitigation. See Exhibit C. Both projects are located within approximately one (1) mile of the Pittsburg earthquake fault which was recently discovered and is classified as active. The Dow facility not only produces but stores hundreds of thousands of pounds of toxic chemicals. The chance of an accidental or catastrophic release due to seismic activity including potential fault rupture leading to "total structural collapse" could have devastating environmental and human effects. The Seismic ground shaking is also deemed in the Initial Study for the pesticide plant to have a potentially significant impact absent mitigation. The Initial Study for the pesticide plant admits that **"most lowland soils in Pittsburg have a high potential for subsidence" and Shrink/Swell potential exists in Lowland Zone Bay Mud Deposits.**" City of Pittsburg's finding of possible adverse significant environmental impact due to the existence of the Pittsburg earthquake fault is an admission and demands the preparation of an EIR for the current BIF project under CEQA.

While an inadequate monitoring program was proposed for Dow pesticide plant for **potential geologic and seismic impacts related to the BIF permit are not even acknowledged.** In Sundstrom v County of Mendocino, the court rescinded the county of Mendocino's approval of a conditional use permit for a sewage treatment plant. 202 Cal. App.3d 296, (1988) That permit required the applicant to conduct post-permit studies to determine if there were significant environmental effects and to propose mitigation for those effects, subject to the planning staff's approval. The court rejected this approach and concluded that the required environmental analysis could not be put off to a future date. The policy of CEQA "requires environmental review at the earliest feasible stage in the planning process". Id. (citing Pub. Resources Code, § 21003.1; No Oil, Inc. v. City of Los Angeles (1974) 13 Cal.3d 68, 84). The court explained that Environmental problems should be considered at a point in the planning process "where genuine flexibility remains." **A study conducted after approval of a project will inevitably have a diminished influence on decision-making. Even if the study is subject to administrative approval, it is analogous to the sort of post hoc rationalization of agency actions that have been repeatedly condemned in CEQA decisions. Id. (citations omitted).**

The court also held that allowing the applicant to conduct the study and propose mitigations that were only subject to planning staff's approval, violates the CEQA requirement that an agency's decision-making body must make the final review and approval of the environmental analysis mandated by CEQA.

As in Sundstrom, **a plan to mitigate significant impacts that are discovered in future environmental assessment is not permitted by CEQA. If mitigation of seismic and soil stability problems related to the risk of accident is allowed to be determined after the issuance of the Negative Declaration and approval of the project, the public will be improperly denied the opportunity to review the environmental impacts of the project. In addition, the staff's proposed approval of mitigation measures proposed by the applicant after the permit is approved violates the CEQA requirement**

that the decision-makers, not the agency staff, be responsible for approving the final environmental analysis.

RESPONSE TO COMMENT 44:

These comments appear to apply to the Initial Study and draft Mitigated Negative Declaration prepared by the City of Pittsburgh for the DOW Sulfuryl Flouride Facility Replacement Project . The Mitigated Neg. Dec. has been approved by the City of Pittsburgh but is currently in litigation with CBE and PANNA. Therefore, Dow has not received approval from the city of Pittsburgh to proceed with the project.

The BIF permit application did include an analysis of seismic and geologic factors. The Part B Application included a seismic design section which included calculations on static and dynamic load that BIF units would be subject to in the event of an earthquake. The foundations of the units were designed in accordance with the Uniform Building Code (UBC). It was determined that there is a potential for differential settlement due to liquefaction based on general information on soils in the area. The Permit requires that Dow submit a geotechnical report to determine if soils under the units are prone to subsidence. Therefore, it is not accurate that geologic and seismic impacts were not acknowledged. As stated previously, DTSC did evaluate seismic and geologic conditions early in the review process. The request for a supplemental geotechnical report to corroborate assumptions used in seismic calculations is not a post-hoc rationalization of our decision.

COMMENT 45: II.(C) DTSC Fails to Accurately Identify the Risks from Hazardous Materials

Although the agency provides a list of hazardous materials, it does not adequately describe the properties of these chemicals nor discuss the potential environmental health and human impact of each of these chemicals. Furthermore, the initial study fails to discuss the interaction of the various materials and the potential impact resulting from those interactions.

The initial study also indicates that the Dow facility is located over groundwater. There is also information related to underground Solid Waste Management Units (SWMUs) in place at the site. **The initial study does not discuss the potential impacts of these SWMUs on the groundwater, let alone the impacts on groundwater that may result from the new project, especially as related to the storage of hazardous waste and the potential leaks that may be associated with that storage.**

RESPONSE TO COMMENT 45:

The health risk assessment does evaluate estimated chemical-specific exposures and toxicity from chemicals which may be emitted in the DOW BIFs. On a chemical by chemical basis, no significant risks are expected to occur. Although the USEPA and DTSC risk assessment process does not specifically evaluate chemical – atmosphere interactions between chemicals once released to environment, the HRA does consider cumulative risks and hazards from the individual chemicals emitted by the facility.

The atmospheric chemistry of hazardous materials is an extremely complicated process greatly influenced by daily levels of sunlight, moisture and the presence of other chemicals. Given this uncertainty, it is not possible to predict all the potential breakdown products, primary or secondary reaction products, or “interactions” to estimate toxicity.

The permit application has included chemical safety data sheets (MSDS) for the 20 chemical compounds listed in Section 7-1 of CEQA Initial Study. This information provides the potential health impacts for a person or a worker exposed to these pure products. Similarly, MSDS are provided for the chemical components of the gaseous streams. The health effects for on-site workers and off-site persons were evaluated in the accident scenarios in the human health risk assessment. There is no sound technical industrial procedure that would evaluate reactions between these chemicals in either liquid or gaseous state.

The hazardous waste storage tanks referred are placed on concrete pad. The pad is surrounded by a concrete berm that can hold more than the capacity of these tanks. The pad and the berm are epoxy-coated to prevent migration of liquids to sub-soils and groundwater.

It should be noted that solid waste managements units (SWMUs) at the entire facility are under the oversight of San Francisco RWQCB. DTSC disagrees with the commenter that storage of hazardous waste poses any potential significant adverse effect to the groundwater, based on the engineering and institutional controls in place.

COMMENT 46A: II.(D) DTSC Improperly Relies on Unsubstantiated Assessments by Dow in Its Characterization of Risks of Upset and to Public Safety.

As is true of much of the Initial Study, more information is needed to understand the magnitude of the risk of the increased generation of hazardous waste. The Initial Study does not identify the nature of the waste, nor does it support its finding of less than significant impact. These serious deficiencies render the project description legally inadequate under CEQA.

RESPONSE TO COMMENT 46A:

The Health Risk Assessment approved by DTSC and referenced in the Initial Study, provided a detailed analysis of potential risk scenarios and relative risks associated with continued operation of the BIF Unit.

The Initial Study Project Description provides information concerning the source and nature of waste generated at the DOW facility that would continue to be treated at the BIF Unit.

Further, because the permit currently being considered by DTSC is for continued operation of the existing BIF Unit, volumes of waste proposed to be processed by the Unit would remain the same as currently authorized. In addition, the replacement of the fertilizer production unit as identified in the Mitigated Negative Declaration prepared by the City of Pittsburg, would result in a decrease in the volumes of wastes generated by the existing unit that are subsequently treated at the BIF Unit. Consequently, the conclusions of the Initial Study are still considered valid and no changes are deemed necessary.

Regarding impacts associated with the chemical components of the hazardous waste, refer to Comment 45.

COMMENT 46B:

CEQA requires the review of the cumulative impacts of a project. Simultaneous with the BIF permit, Dow Chemical has sought a Negative Declaration for new construction of a pesticide plant that would also

produce highly toxic chemicals and waste products. Without a complete Environmental Impact Review, the approval of Dow Chemical's operations according to a piecemeal approach is illegal under CEQA and fails to meet the Act's dual purpose of informed decision-making and public participation. Kings County Farm Bureau v. City of Hanford, 221 Cal.App.3d 692, 720, 270 Cal.Rptr. 650 (1990).

RESPONSE TO COMMENT 46B:

At the time the Initial Study and Mitigated Negative Declaration were circulated for public review starting on October 27, 2001, DTSC was not aware of any land use decision being entertained by the City of Pittsburg for the DOW Sulfuryl Fluoride Facility Replacement project. Consequently, it was not included in the Initial Study analysis of cumulative impacts for the DOW BIF permit renewal project. Further, DTSC did not receive comments regarding the proposed Sulfuryl Fluoride Facility Replacement project during the public comment period for the DOW BIF CEQA package. When the City of Pittsburg provided notice of its intent to adopt a Mitigated Negative Declaration for the proposed DOW Sulfuryl Fluoride Facility Replacement project on May 16, 2002, DTSC was not included on the distribution list by the City to receive a copy of the notice, nor did DTSC receive notice of this project through the State Clearinghouse. Consequently, when DTSC opened its second public comment period on the DOW BIF permit renewal project on September 20, 2002, it was not aware of the DOW Sulfuryl Fluoride Facility Replacement project to the extent that it could be included in the analysis of cumulative impacts for the DOW BIF permit renewal project. Subsequent review of the DOW Sulfuryl Fluoride Facility Replacement project prepared by the City of Pittsburg shows that the project entails replacement of an old Sulfuryl Fluoride Facility with one that uses safer and less waste-producing technologies to produce sulfuryl fluoride. As this appears to be a replacement project, with less production of waste products that ultimately would be treated at the BIF Unit, DTSC considers impacts from this project, in relation to the DOW BIF permit renewal project, to be less than significant. Consequently, the conclusions of the Initial Study are still considered valid and no changes are deemed necessary.

COMMENT 46C:

The Proposed Negative Declaration states that the BIF Project does not pose a significant health or safety hazard to the community. The application for the use permit must include a complete inventory of the amounts, sources and types of hazardous materials, and an emergency response plan. PMC section 18.84.470. The discussion of impacts from explosions, fires, or a major catastrophe focuses on the danger to the community, but does not consider the health and safety impacts of such accidents on the workers. Moreover, major industrial accidents in Contra Costa County have increased. For example, Dow Chemical has had two major leaks, both of which injured several workers.

RESPONSE TO COMMENT 46C:

As part of any business plan handling or processing hazardous materials, DOW is required to maintain a listing of all such materials. Further, the facility is required to have an emergency response plan in place as part of its on-going effort to respond to accidents and emergency situations that may arise. The Initial Study provides references to these requirements. Because the conclusions of the Initial Study demonstrate that impacts would be less than significant, the requirement for an EIR is not justified. Consequently, the conclusions of the Initial Study are still considered valid and no changes are deemed necessary.

COMMENT 46D:

The Initial Study's discussion of the hazards of human exposure fails even to mention industrial accidents and the exposure of workers on site. Given the very real danger of such major accidents, an EIR is required to fully analyze the risks and to take all steps possible to protect the health and safety of the workers and the impacted community.

The courts have repeatedly held that "an accurate, stable and finite project description is the sine qua non of an informative and legally sufficient [CEQA document]." County of Inyo v. City of Los Angeles, 71 Cal.App.3d 185, 193 (1977). Therefore, an EIR is required to fully assess the actual risks of spills of chemicals and toxic materials and to consider all the possible methods of safeguarding public health and safety. Sundstrom requires that the City analyze this impact prior to project approval and study feasible ways to mitigate the impact during the CEQA review process. The City has failed to conduct such an analysis.

RESPONSE TO COMMENT 46D

It remains DTSC's position that the Risk of Upset and Public Safety sections of the Initial Study provide sufficient information and analysis of potential impacts to on-site workers and off-site receptors. Consequently, the conclusions of the Initial Study are still considered valid and no changes are deemed necessary. Also see RESPONSE TO COMMENT 38 & 39

COMMENT 47: II. (E) Dow's BIF Permit Constitutes Impermissible Piecemealing under CEQA.

CEQA mandates "that environmental considerations do not become submerged by chopping a large project into many little ones -- each with a minimal potential impact on the environment -- which cumulatively may have disastrous consequences." Bozung v. Local Agency Formation, 13 Cal.3d 263, 283-84 (1975); City of Santee v. County of San Diego, 214 Cal.App.3d 1438, 1452 (1989). Before undertaking a project, the lead agency must assess the environmental impacts of all reasonably foreseeable phases of a project. Laurel Heights Improvement Assoc. v. Regents of the Univ. of Calif., 47 Cal.3d 376, 396-97, 253 Cal.Rptr. 426 (1988) (EIR held inadequate for failure to assess impacts of second phase of pharmacy school's occupancy of a new medical research facility.) A public agency may not segment a large project into two or more smaller projects in order to mask serious environmental consequences. Id. CEQA prohibits such a "piecemeal" approach. Kings County Farm Bureau v. City of Hanford, 221 Cal.App.3d 692, 720, 270 Cal.Rptr. 650 (1990).

The Dow BIF PND and the associated "Draft Hazardous Waste Facility Permit" document a series of incremental permitting actions by DTSC which have resulted in substantial new Dow facilities. See, e.g., Draft Hazardous Waste Facility Permit, Appendix I: History of Modifications p. 31-32. This represents exactly the type of piecemealing activities that are not permitted under CEQA.

RESPONSE TO COMMENT 47:

The activities identified in Draft Hazardous Waste Facility Permit, Appendix I: History of Modifications p. 31-32 are for minor operational and equipment related modifications or replacements made by DOW that did not involve a formal permit modification. These activities are not considered "phases" of a project and were considered to be exempt from CEQA because they did not involve a formal approval action by DTSC. Consequently, the conclusions of the Initial Study are still considered valid and no changes are deemed necessary.

COMMENT 48: II. (F) The Proposed Negative Declaration Contains Errors and Omits Required Information that Make it Legally Deficient

CEQA provides that before a Negative Declaration can be issued, the initial study must "provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment." CEQA Guidelines section 15063(c)(5). Agencies "must also disclose the data or evidence upon which the persons conducting the study relied." Citizens for Sensible Development of Bishop v. County of Inyo, 172 Cal.App.3d 151 (1985) at 171. The public should not have to "ferret out the true nature of the public agency's project and its possible environmental consequences [...]" public reaction to a proposed project is no substitute for adequate consideration of environmental concerns by the lead public agency." McQueen v Board of Directors of Mid-Peninsula Regional Open Space District, 202 Cal. App. 3d 1136 at 1151. In contrast to these standards, the Proposed Negative Declaration makes

bald conclusory statements that the BIF Project will not have significant impacts. CEQA holds that the public cannot be expected to take on faith the assertions of the project proponent. However, that is precisely the situation here.

RESPONSE TO COMMENT 48:

See RESPONSE TO COMMENT 37.

COMMENT 49: II. (G) The Proposed Negative Declaration Fails to Consider the Cumulative Effects of the Entire Dow Chemical Project

The Dow BIF PND limits its consideration of cumulative impacts to Dow's Pittsburg facility. Even by this impermissibly narrow definition, the PND fails to consider other recent, pending, and known projects at the same Dow facility, including new construction of a pesticide plant. According to Dow Chemical's website the Pittsburg plant is "is the largest integrated chemical manufacturing complex of its kind on the west coast.. [...] Products on site include herbicides and pesticides [...] latex and anti-microbials.⁵ In the year 2000 the Toxic Release Inventory documented emissions of 130 pounds of SF, 2,350 pounds of HCl, 350 pounds of Cl and 18 pounds of HF from Dow's Pittsburg facility. In addition, the plant had NOx emissions of 790 tons in one year. The Toxic Release Inventory quantifies annual emissions of at least 27 separate toxic chemicals from Dow Chemical's Pittsburg facility. The particular dangers of accidental releases from Dow's facility include the possible synergistic effects of chemical combinations which should also be examined under the review of cumulative impacts required by CEQA. Commenting on the purpose of the cumulative impacts analysis, one commentator states, "One of the most important environmental lessons evident from past experience is that environmental damage often occurs incrementally from a variety of small sources. These sources appear insignificant, assuming threatening dimensions only when considered in light of the other sources with which they interact." *Kings County Farm Bureau v. City of Hanford*, 221 Cal.App.3d 692, 720, 270 Cal.Rptr. 650. (citing Selmi, *The Judicial Development of the California Environmental Quality Act* (1984) 18 U.C. Davis L. Rev. 197, 244). Similarly, the synergistic effects of multiple chemicals which in isolation may appear insignificant can also assume threatening proportions.

Dow should be required to consider the impacts of the proposed BIF project together with those of other facilities, including the proposed new pesticides plant. In addition, an EIR should consider the impacts of the BIF project together with the impacts of other polluting facilities in the area. Finally the EIR should consider the impacts of the Project together with impacts of reasonably foreseeable projects, such as the expansion of Highway 4. The impacts of increased traffic from the BIF and pesticides projects, together with traffic impacts from construction on Highway 4, plus vehicle emissions from both projects, will have a cumulative impact on the City which should be analyzed in an EIR.

RESPONSE TO COMMENT 49:

See RESPONSE TO COMMENT 37 & 46B.

COMMENT 50: Conclusion: CEQA Requires the Preparation of an EIR for the Proposed Project

For all of the above reasons, CBE respectfully requests that the DTSC defer action on the BIF project until it

⁵ www. Dow.com/facilities/namerica/pittsburg.htm.

prepares an EIR that fully complies with CEQA, analyzing all of the project's environmental and public health and safety impacts, and proposing methods to reduce or eliminate those impacts. In addition, any action on the Pesticide Project should be deferred until the Applicant submits a complete application for a Conditional Use Permit. Should you have any questions regarding this matter, please do not hesitate to contact CBE Lead Scientist Julia May at 510-302-0430.

RESPONSE TO COMMENT 50:

See RESPONSE TO COMMENT 26 & 46B.

COMMENTS 51 THROUGH 60 WERE MADE BY MIKE BOYD, CALIFORNIANS FOR RENEWABLE ENERGY, INC. BY E-MAIL.

Californians for Renewable Energy, Inc. (CARE)
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Soquel, CA 95073
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COMMENT 51:

CARE continues to formally object to and protest the proposed Draft Hazardous Waste Facility Boiler and Industrial Furnace Permit and Draft CEQA Negative Declaration for Dow Chemical Company (Dow) at its facility located on Loveridge Road in Pittsburg, California.

Irrespective of CARE's comments on this project to DTSC on 12-14-01 the project and mitigation proposed over a year ago by Dow has not substantially changed. The permit sought by Dow would authorize the continued storage of hazardous waste generated on-site and its processing in boiler & industrial furnaces, without the required Environmental Justice analysis⁶ and environmental review required under CEQA⁷. The treatment units consist of the two boiler & industrial furnaces (also known as Halogen Acid Furnaces) and associated hydrochloric acid recovery and air pollution control systems. The relief CARE still seeks is to require the completion of an Environmental Impact Report (EIR) by the lead agency DTSC that identifies all environmental and socioeconomic impacts and their mitigation as required by CEQA. Additionally the associated federally required Environmental Justice analysis needs to be completed by DTSC⁸ prior to approval of the permit.

CARE herein provides our response to DTSC's response to our prior comments of December 14, 2001.

⁶ Title VI of the Civil Rights Act of 1964 requires the California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC) to identify and address any disproportionately high and/or adverse human health, socioeconomic, or environmental impacts of their programs, policies, and actions on minority and/or low-income populations.

⁷ CEQA is the law that allows Californians to be informed and voice their opinion about projects that may affect their environment. CEQA requires a review of the environmental impacts of projects. CEQA has a broad, strong right of public participation, which has a political component and the violation or deprivation of which has constitutional consequences.

⁸ DTSC is required to comply with the requirements of Title VI of the Civil Rights Act of 1964, as this agency is a recipient of Federal funding.

DTSC is unaware of any "requisite" or "required" environmental justice analysis to be performed in association with the issuance of the DOW permit. In addition, DTSC is unaware of any discriminatory and/or illegal practices alleged to have occurred in the decision-making process. Instead, DTSC has, to the extent feasible, ensured that its decisions and actions associated with the issuance of this permit avoid adding to disproportionate environmental and/or health impacts on any affected community. In addition, DTSC has, and will continue, to reduce disproportionate environmental and health-related impacts on such communities.

At its public hearing CARE provided a copy of a March 8, 2002 memo from Leslie Krinsk, Senior Staff Counsel, of the Air Resources Board (ARB) on the subject of state agency duties under CEQA as it relates to the provision of the Federal Civil Rights Act (EJ), making conclusions contrary to the responses cited above.

The recent enactment of Public Resources Code sections 71110 through 71115 and Government Code section 65040.12, in conjunction with the requirements of federal law, the SIP, and EPA regulations, require the ARB to infuse EJ into every aspect of decision-making. This panoply of statutory authority animates the general authority of the ARB to "do such acts as may be necessary for the proper execution of the powers and duties granted to, and imposed upon, the state board by this division [26 of the Health and Safety Code] and by any other provision of law."⁹ Further, the rules, regulations, and standards that the ARB adopts must be "consistent with the state goal of providing a decent home and suitable living environment for every Californian"¹⁰ – and so, full circle back to CEQA.

The ARB, as the agency responsible for "coordinating efforts to attain and maintain ambient air quality standards,"¹¹ "coordinat[ing], encourag[ing], and review[ing] the efforts of all levels of government as they affect air quality,"¹² and "undertak[ing] control activities in any area wherein it determines that the local or regional authority has failed to meet the responsibilities given to it by this division or by any other provision of law,"¹³ has the authority and the responsibility to ensure that the Districts¹⁴ also comply with the EJ requirements imposed by state and federal law. This may be done formally or informally, by binding regulations, directory guidance, or informal cooperation and discussion.

While CEQA is not the only means available to ensure that EJ becomes a reality, it is one option that is currently up and running; that public agencies and the private sector to whom they issue permits have substantial experience with; that has spawned considerable regulatory guidance and decisional precedent; that can be readily adapted to the task at hand without creating another layer of bureaucratic report-making; that has been endorsed by the Legislature and the federal government; that meshes well

⁹ Health and Safety Code §39600; emphasis added

¹⁰ Health and Safety Code §39601(c)

¹¹ Health and Safety Code §39003

¹² Health and Safety Code §39500

¹³ Health and Safety Code §39002, emphasis added. (See also, Health and Safety Code sections 41500 – 41505)

¹⁴ We note that Health and Safety Code section 39037 defines "local or regional authority" as "the governing board of any city, county, or district." However, it is beyond the scope of this memo to opine on the extent to which the ARB could direct city and county land use authorities to address EJ cumulative impact issues in carrying out the air quality aspects of their facility siting decision-making and the best means to use in doing so.

both procedurally and substantively with the regulatory law implemented by the ARB and the Districts; and that can be supplemented with additional EJ compliance tools as necessary or desirable.

CARE contends based on this evidence that DTSC has failed to perform its duties under CEQA as it regards Environmental Justice.

RESPONSE TO COMMENTS 51:

See RESPONSE TO COMMENT 27& 37.

Please refer to Response to Comment 27 regarding ARB memorandum on CEQA and environmental justice.

COMMENT 52: In regards to meaningful and informed public participation DTSC's response to comment 17 states:

Please refer to the "Background" section (Page 1) of this document, which describes what public participation activities have been conducted for this project. DTSC believes that it has conducted meaningful public participation and involvement in the environmental review process established under CEQA, and has formalized this awareness through established policies and affected agencies. These policies and procedures were followed in this case as prescribed by CEQA, as evidenced by appropriate noticing of the proposed Negative Declaration and Initial Study for review and comment by the public. The comment provided does not provide evidence to suggest that this conclusion is inaccurate.

CARE is frustrated by what appears to use to be an attempt by the DTSC to thwart our meaningful and informed public participation, by repeating the inadequate public notice and comment process, on the same project it considered over a year ago, rather than requiring an EIR for the project. Of course, part of the frustration stems from the fact that an EIR applies environmental (particularly the analysis of immediate and long-term, as well as individual and cumulative, impacts on air, water and biological resources), engineering and public health/safety analyses to numerous technical areas.¹⁵

The way this multi-national corporation constituting the applicant is being allowed to piecemeal the process is analogous to the strongly forbidden "chopping up [of] a proposed project into bite-size pieces which, individually considered, might be found to have no significance on the environment." (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 716, citing *Orinda Assn. v. Board of Supervisors* (1986) 182 Cal.App.3d 1145, 1171, 1172; see also *Bozung v. LAFCO* (1975) 13 Cal.3d at 283-284; *Sundstrom*, 202 Cal.App.3d 296, 309.) In the present case what we have is a chopping up of the CEQA duty to provide information that trivialize the nature and extent of project impacts. In addition, the piecemealing requires that CARE to respond, and allows the applicant to then reply, without requiring a comprehensive analysis, and without providing structure or finality to the process. And when the process gets near the end, strict time lines are imposed which create additional burdens on intervenors and other members of the public, further hindering if not completely preventing their full and meaningful participation in

¹⁵ In terms of the cost of public participation, the scope of the DTSC review is simply overwhelming to a citizens group that must rely on public donations to retain the experts to properly participate. To a multi-national corporation such as Dow, on the other hand, the expense is merely a tax-deductible cost of doing business that probably doesn't even make a noticeable dent to corporate coffers.

a process heavily weighed in favor of an applicant with virtually unlimited resources whose only excuse for piecemealing the required information is to use it as a tactic to avoid or minimize opposition.

This is a recipe for ecological disaster being carried out without adequate legislative knowledge or approval. Public participation is a vital component of CEQA, which is primarily a statutory scheme founded on full and good faith disclosure. CEQA requires the decision makers to document and consider the environmental implications of their actions, while at the same time allowing--and requiring--the public to fully and meaningfully participate in the CEQA review process and interact with the decision makers on environmental issues (See Remy, et al., GUIDE TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) (10th ed. 1999), pp. 1-4, 27-28). No restrictions such as the imposition of an administrative litigation process that discourages and curtails public participation are allowed under CEQA. On the contrary, CEQA authority provides that anything that infringes upon this vital public participation component is presumptively prejudicial and requires issuance of a writ mandating the setting aside project approval.

The Dow project also triggers the proposition that CEQA is not merely "procedural" statutory scheme, like the federal statutory scheme CEQA is modeled after, The National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 et seq. "CEQA contains a "substantive mandate" that public agencies refrain from approving projects with significant environmental effects if "there are feasible alternatives or mitigation measures that can substantially lessen or avoid those effects.'" (Remy 10th at pp. 1-2, quoting and citing Mountain Lion Foundation v. Fish and Game Commission (1997) 16 Cal.4th 105, 134; CEQA §21002.) Other CEQA authority quoted and cited for these and related propositions include Sierra Club v. State Board of Forestry (1994) 7 Cal.4th 1215, 1233. Sierra Club v. Gilroy City Council (1990) 222 Cal.App.3d 30, 41; Citizens for Quality Growth v. City of Mount Shasta (1988) 198 Cal.App.3d 433, 440-41; Guidelines §§ 15002(a)(3), 15021(a)(2) & (c), 15041(a), 15063(c)(2), 15091(a), 15093, 15126(c) & (d), 15064, 15370.)

RESPONSE TO COMMENTS 52:

It remains DTSC's position that the public participation and involvement process conducted as part of the draft Negative Declaration and draft permit review processes were consistent with guidelines and procedures required under CEQA, the State CEQA Guidelines and the Health and Safety Code Chapter 6.5. These guidelines and procedures were designed allow the public an opportunity to fully and meaningfully participate in the CEQA process and to assure the public that the environment and public health are protected. **Please see detailed Public Participation Activities at bottom of Page 1, Also, see RESPONSE TO COMMENT 37.**

COMMENT 53: DTSC RESPONSE TO COMMENT 17 FURTHER STATES

With respect to Title VI environmental review process, the CEQA process does not require such an examination, nor does it prescribe guidelines for evaluating such complaints. The imposition of any process initiated by a Lead Agency without legal mandate and regulatory requirements would be deemed arbitrary, and in violation of the due process provisions of the State Constitution. Consequently, while DTSC is aware of efforts by Cal/EPA and the U.S. EPA to establish such a legal and regulatory framework, such an examination cannot be legally undertaken under CEQA or permitting processes. The comment does not provide evidence to suggest that this conclusion is inaccurate.

The agency responsible for "coordinating efforts to attain and maintain ambient air quality standards," "coordinat[ing], encourag[ing], and review[ing] the efforts of all levels of government as they affect air

quality," and "undertak[ing] control activities in any area wherein it determines that the local or regional authority has failed to meet the responsibilities given to it by this division or by any other provision of law," has the authority and the responsibility to ensure that the Districts also comply with the EJ requirements imposed by state and federal law" (from ARB's conclusion on duties of agencies under CEQA regarding EJ).

With respect to preparation of a Negative Declaration as opposed to an Environmental Impact Report (EIR), it is DTSC's position that it followed the prescribed process for conduct of Initial Studies as contained in the State CEQA Guidelines. Under this process, DTSC was obligated to prepare a Negative Declaration based on the facts presented in the Initial Study that demonstrated potential impacts were either insignificant, less than significant, significant unless mitigated, or having no impacts. To conclude that an EIR was required is inappropriate, as well as technically and legally not consistent with CEQA or State CEQA Guidelines.

DTSC would also like to respond to the comment that "there is clear evidence of significant environmental and socioeconomic impacts of the project, which have not been properly identified or mitigated". First, as discussed above, the conclusions of the Initial Study found that environmental impacts of the proposed project were not significant based on the facts presented. The comment does not provide evidence to suggest that this conclusion is inaccurate.

Second, the Initial Study process does not require an examination of socioeconomic impacts; this is only a requirement when a Lead Agency must prepare an EIR based on finding that one or more impacts were found to be significant. To conduct an analysis of socioeconomic impacts under these circumstances is also deemed inappropriate, and technically and legally not consistent with CEQA or State CEQA Guidelines.

RESPONSE TO COMMENT 53:

See Response to Comments 27, 37, and 39 regarding our finding that an EIR is not justified, and Comment 47 regarding piecemealing.

COMMENT 54: DTSC response to comment 19

DTSC's administrative and CEQA process allows the public to fully participate in the administrative decision-making process at a point and in a manner affording a fair opportunity to influence the decision-making. DTSC has conducted numerous public participation activities. Please refer to background section of this document.

CARE disputes this finding regarding CEQA's requirement do not require that DTSC complete an EIR on this project. CEQA achieves its purpose of long-term protection of the environment by functioning as "an environmental full disclosure statute, and the EIR is the method . . . [of] disclosure . . ." Rural Landowners Assn. v. City (1983) 143 Cal.App.3d 1013, 1020. An EIR's purpose is "to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment . . ." (PRC § 21061; Karlson v. City of Camarillo (1980) 100 Cal.App.3d 789, 804) and acts as "an environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to

environmental changes before they have reached the ecological points of no return" County of Inyo v. Yorty (1973) 32 Cal.App.3d 795, 810.

As stated before, the way this multi-national corporation constituting the applicant is being allowed to piecemeal the process is analogous to the strongly forbidden "chopping up [of] a proposed project into bite-size pieces which, individually considered, might be found to have no significance on the environment."

RESPONSE TO COMMENT 54:

See Response to Comments 26, 37, and 39 regarding our finding that an EIR is not justified, and Comment 47 regarding Piecemealing.

COMMENT 55:

DTSC has decided to re-notice the Draft Permit and Draft CEQA Initial Study for another 45-day comment period. The public notice, and fact sheet have been translated in Spanish. A public workshop and a public hearing will be held and a Spanish interpreter will be present at both the public workshop and public hearing.

While we agree that it is important to provide Spanish translation service, the way this multi-national corporation constituting the applicant is being allowed to piecemeal the process is analogous to the strongly forbidden "chopping up [of] a proposed project into bite-size pieces which, individually considered, might be found to have no significance on the environment." In addition to greatly increasing our cost of public participation, the existing DTSC process, which, among other things (without limitation), includes piecemealing the public disclosure of information vital to an adequate CEQA review, also makes it extremely difficult if not virtually impossible to intelligently determine if and when to retain additional experts to continue participating in the ongoing review process in a knowing and meaningful manner. As it stands, this is a clear violation of the strong CEQA right of public participation which will undoubtedly continue, and most probably get worse, unless immediate steps are taken to rectify it--assuming, of course, that such steps are feasible

DTSC's response evinces their failure to understand the difference between the duties and responsibilities of the BAAQMD under the Federal Clean Air Act (CAA) and the DTSC as the "lead agency" under CEQA.

RESPONSE TO COMMENT 55:

Refer to Comment 47 regarding piecemealing for CEQA, Comment 27 regarding adequate public participation. DTSC respectfully disagrees that it does not understand the difference between its duties and responsibilities as lead agency for this project and those of BAAQMD under the federal Clean Air Act.

COMMENT 56: DTSC's response to Comment 20

Further, prior to public noticing of the Initial Study, DTSC also conducted a review of both the Delta Energy and Los Medanos Power Plant (formerly named Pittsburg District Energy Facility Project) Applications for Certification (AFC) prepared as part of the California Energy Commission (CEC) power plant siting process. DTSC examined the analyses contained in the AFCs to assess potential hazardous waste related impacts from these proposed projects, from both an individual as well as cumulative standpoint. DTSC found that impacts from hazardous waste related activities from these proposed plants would be insignificant and that permit conditions of affected local and state agencies such as the BAAQMD would further ensure that impacts would fall below significance thresholds. DTSC agreed with this assessment and did

not feel that further mitigation measures were necessary beyond those described in the AFC and as subsequently required by CEC during its approval of these projects. ^[16]

RESPONSE TO COMMENT 56:

DTSC believes that it is in the public interest that we proceed with the issuance of BIF permit, thus ensuring more stringent control mechanisms are in place versus current interim status authorization. However, should there be a finding as a result of litigation, regarding the Complaint before the US Office of Civil Rights, please inform the DTSC so it can reconsider the impact of that decision on the BIF permit.

COMMENT 57: DTSC's response to comment 22

The CO emissions from the HAFs are less than 10 pounds/day each. CO catalysts are not required for such low emission rates.

The BAAQMD requires continuous emission monitors (CEMS) for NO_x emissions only under certain circumstances. Regulation 1-520 requires CEMS for boiler and steam generators if the equipment capacity is 250 MM BTU/hour or more. Large nitric acid plants (300 tons per day or more) are also required to have NO_x CEMS. Regulation 9-9-501 requires NO_x CEMS for 10 MW or larger Gas Turbines, which generally have capacities of more than 100 MM BTU per hour. The MS HAF and ST HAF capacities are 5 MM BTU per hour and 3 MM BTU per hour, respectively, with NO_x emissions of less than 10 pounds per day and less than 20 pounds per day, respectively. CEMS would not be appropriate for such low capacity sources with these levels of NO_x emissions.

Two distinctly different standards apply to the project, both must be complied with, the Federal program under the air district's PSD, authority to construct permits, and Title V permit program, as well as the duties under the California Environmental Quality Act (CEQA) of the DTSC as the lead agency and the Bay Area Air Quality Management District (BAAQMD) as an affected agency. Apparently DTSC's misinterpretation of these duties has created a conflict between the purposes of the BAAQMD, under the federal Clean Air Act and the purposes of the DTSC Staff to achieve the maximum mitigation feasible under CEQA. This record evinced the fact that DTSC ignored its duties under CEQA requiring it to achieve the maximum mitigation feasible under CEQA.

CEQA requires mitigation measures to be formulated in an Environmental Impact Report, to reduce significant adverse project effects to a level of insignificance (Guideline §15126(c)). The mitigation measures are not just informational; if a project has significant environmental impacts identified in an EIR, feasible mitigations must be implemented or the project must be denied. PRC§21081. As noted CEQA commentators, Remy, Thomas, Moose and Manley observed, "[i]n contrast to [the National Environmental

¹⁶ The findings of the BAAQMD, and CEC regarding the impacts of the Los Medanos Energy Center and Delta Energy Center are currently the subject of a complaint before the US EPA Office of Civil Rights. This complaint challenges the assumptions being made by DTSC regarding these projects. As this complaint has been formerly accepted for investigation by US EPA, and is subject of one of the nations first US EPA sponsored Alternative Resolution processes, the two projects cited are still being subjected to review, and litigation as such. Therefore such a determination by DTSC is without a legal basis in fact at this time.

Policy Act], CEQA requires agencies to implement . . . feasible alternatives identified in EIRs for projects that will otherwise cause significant adverse impacts." Guide to the California Environmental Quality Act (CEQA) (9th ed. 1996), p. 9, citing PRC § 21002, 21081, Guidelines §§ 15002(a)(3), 15021(a)(2), 15091(a); Sierra Club v. Gilroy (1990) 222 Cal.App.3d 30, 41; Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692, 730-731. Thus, "an agency cannot satisfy the statute simply by 'considering' the environmental impacts of a proposed project." Guide to CEQA, supra, pp. 9-10, citing Burger v. County of Mendocino (1975) 45 Cal.App.3d 322.

Agencies must deny approval of a project with significant adverse effects when feasible alternatives can substantially lessen the effects. Sierra Club v. Gilroy (1990) 222 Cal.App.3d 30, 44, 41 citing Citizens for Quality Growth v. City of Mt. Shasta (1988) 198 Cal.App.3d 433, 440-441; Guidelines §§ 15002(a)(3), 15021(a)(2), (c), 15041(c), 15364, 15370.

A fundamental purpose of an EIR is to provide decision makers with information they can use in deciding whether to approve a proposed project, not to inform them of the environmental effects of projects that they have already approved.

RESPONSE TO COMMENT 57:

See Response to Comment 37 regarding requirements for mitigation measures.

COMMENT 58:

In accordance with the BAAQMD's Toxic Risk Management Policy and currently accepted practice, a hazard index of 1.0 or above is considered significant. Since DTSC found that the toxic impact of the neither the MS HAF nor the ST HAF are required to have TBACT, because the units were installed before the BAAQMD's Risk Management Policy was adopted and have had no emission increases since the policy was adopted, this evinces the fact that DTSC has failed to comply with the requirements of CEQA to maximize environmental protection through feasible mitigation. Since the mitigation to achieve TBACT for the MS HAF and the ST HAF is available DTSC has failed in its duties under CEQA to require feasible mitigation. This duty does not apply under the BAAQMD's regulations.

DTSC's findings that "the particulate control measures currently being use may not qualify as TBACT for control of toxic particulate matter today". PM10 is a significant environmental impact under CEQA and the CAA, and should have been evaluated in the DTSC's review. Additionally, there is no evidence in the record that the risk assessment performed by the District incorporate the "precautionary principal" in a risk assessment it performed on the project.

Sections 21061, 21100 and 21151 of the California Public Resources Code require every public entity that proposes to approve a discretionary activity or "project" that may significantly affect the environment to read and consider the project's environmental impact report ("EIR").¹⁷ An EIR is required to be prepared, or caused to be prepared, and certified by any state or local agency for any project they intend to carry out or approve which

¹⁷ " . . . An environmental imp act report is an informational document which, when its preparation is required by this division, shall be considered by every public agency prior to its approval or disapproval of a project." Pub. Res. Code §21061.

may have a significant effect on the environment.¹⁸ Only one EIR need be prepared and where a project requires multiple approvals by various state and local agencies, one agency becomes the project "lead" agency¹⁹ and the other agencies are "responsible" agencies.²⁰ The EIR is prepared by the "lead" agency, and reviewed and considered by the other "responsible" agencies approving the project. In this action, DTSC is the lead agency and the BAAQMD is a responsible agency; therefore DTSC is required to prepare the EIR under the CEQA Guidelines, 14 C.C.R. section 15000, et seq.

RESPONSE TO COMMENT 58:

As stated in our Response to Comment #3, requirements of TBACT do not apply. However, it should be noted that even if they did apply, it would apply to only Symtet-HAF for the emission of NOx. Note that this unit is equipped with BACT recommended for NOX. Further, this NOx treatment unit has not been in operation because it never exceeded the trigger levels set by the BAAQMD. The HRA did measure emission of particulate matter (PM10). These PM10 levels were incorporated in HHRA. See Response to Comments 26, 27 and 39 for requirements of an EIR. See Response to Comments 3 and 37.

COMMENT 59: The intent of our comment regarding the worst-case scenario of the facility being struck by an incendiary device included such devices as a jetliner filled with fuel hitting the facility.

Response to Comment 23

Please refer to the Response to Comment 8 regarding plausible scenarios that were considered in the risk of upset analysis (as part of the Health Risk Assessment). It should be noted that access by the public to the hazardous waste units is restricted by high security fence and guard system. Hazardous waste units are over 500 feet from the fence line.

In the event of catastrophic incident such as firing of incendiary devices, the probability of them hitting these hazardous waste units amongst all the facility equipment within Dow does not appear to be plausible. However, in the event of incident involving explosion with incendiary devices and associated fires, Dow has an onsite 24 hour, 7 day a week fire fighting crew available. In addition, the facility has an arrangement with the local fire department of rapid response in the event of such an incidence.

DTSC has provided no evidence in the record to substantiate its findings that "In the event of catastrophic incident such as firing of incendiary devices, the probability of them hitting these hazardous waste units amongst all the facility equipment within Dow does not appear to be plausible." Not only is such a scenario plausible in light of the events of September 11, 2001, but also such a scenario is reasonably foreseeable under CEQA, since such an incident has already occurred.

¹⁸ Pub. Res. Code §§ 21100, 21151.

¹⁹ "Lead Agency" is "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect on the environment." Pub. Res. Code § 21067."

²⁰ A "responsible agency" is "a public agency, other than the lead agency, which has responsibility for carrying out or approving a project." Pub. Res. Code §21069.

RESPONSE TO COMMENT 59:

See Response to Comment 8.

Similar to our Response to Comment WW for plausible scenarios for a terrorist firing incendiary device at Dow Chemical and hitting BIF units, we do not consider the scenario of jetliner filled with fuel as a reasonably plausible scenario.

COMMENT 60: Conclusion

CARE is seeking to require the completion of an Environmental Impact Report (EIR) by the lead agency DTSC that identifies all environmental and socioeconomic impacts (including a CEQA/CAA compliant health risk assessment) and their mitigation as required by CEQA. Additionally the associated federally required Environmental Justice analysis needs to be completed by DTSC prior to approval of the permit. The failure to require an EIR, in light of the record as it now stands, and the approval of this project with the existing ND, shall be interpreted by CARE as a prejudicial abuse of discretion by the DTSC, and may be the subject of litigation, and further administrative review before the US EPA.

RESPONSE TO COMMENT 60:

Please refer to Comment 36 regarding cumulative impacts of dioxins, Comments 26, 27, and 39 for EIR, Comment 27 for ARB memorandum on CEQA letter, Comment 27 for public participation, Comment 47 regarding piecemealing, Comment 37 for mitigation measures, and Comment 28 for plausible scenarios.